March 18, 2016

Sent via electronic mail and certified mail

Reviewing Officer, c/o
USDA Forest Service Region 2, Rocky Mountain Region
Attn: Objection Reviewing Officer – Planning Department
740 Simms St.
Golden, CO 80401

Email: r02admin_review@fs.fed.us

Re: SBEADMR FEIS OBJECTION

Dear Reviewing Officer,

High Country Conservation Advocates (HCCA), along with Wilderness Workshop, Great Old Broads for Wilderness, Rocky Mountain Wild, WildEarth Guardians, Rocky Smith and Linda Miller (together "Objectors"), submit the following objection to the U.S. Forest Service's decision to implement Alternative 2 as analyzed in the Spruce Beetle Epidemic and Aspen Decline Management Response (SBEADMR) Final Environmental Impact Statement (FEIS). The SBEADMR proposal affects Forest Service lands within the Grand Mesa, Uncompahgre and Gunnison National Forests (GMUG). In a Draft Record of Decision (ROD) signed by Forest Supervisor Scott Armentrout, the Forest Service approves treating a maximum of 120,000 acres (up to 60,000 acres each of commercial and noncommercial treatments) over the next eight to twelve years, and constructing up to 178 miles of new roads.

As required by 36 C.F.R. § 218.8, the names, physical addresses, and telephone numbers for the organizations filing this objection are listed below. As required by 36 C.F.R. § 218.2, we identify HCCA as the "lead" objector representing the other objectors for the purposes of communication regarding the objection.

High Country Conservation Advocates PO Box 1066 (411 3rd St., Unit 3) Crested Butte, CO 81224 (970) 349-7104

Wilderness Workshop PO Box 1442 (520 S. 3rd St., Suite 27) Carbondale, CO 81623 (970) 963-3977

Rocky Mountain Wild 1536 Wynkoop St., Suite 900 Denver, CO 80202 (303) 579-5162 Rocky Smith 1030 Pearl #9 Denver, CO 80203 (303) 839-5900

Great Old Broads for Wilderness PO Box 2924 (605 E. 7th Ave.) Durango, CO 81302 (970) 285-9577

WildEarth Guardians 2590 Walnut St. Denver, CO 80205 (503) 730-9242 Linda Miller PO Box 883 (513 W. Columbia) Telluride, Colorado 81435 (970) 728-5603

I. INTERESTS AND PARTICIPATION OF OBJECTING PARTIES

High Country Conservation Advocates ("HCCA") is located in Crested Butte, Colorado with over 600 members. HCCA was founded in 1977 to protect the health and natural beauty of the land, rivers, and wildlife in and around Gunnison County now and for future generations. For almost 40 years HCCA has engaged on timber management and public lands issues to prevent irreparable harm to its members' interests. HCCA's members live, work and recreate in and surrounding the areas proposed for treatment under the SBEADMR project.

Rocky Smith is a forest management analyst and consultant with 35 years' experience in reviewing projects, plans, policies, and legislation concerning the management of national forests.

Wilderness Workshop ("WW") is a non-profit environmental organization with 800 members. WW's mission is to protect and conserve the wilderness and natural resources of the Roaring Fork Watershed, the White River National Forest, and adjacent public lands. WW engages in research, education, legal advocacy and grassroots organizing to protect the ecological integrity of local landscapes and public lands. We focus on the monitoring and conservation of air and water quality, wildlife species and habitat, natural communities and lands of wilderness quality. WW has a longstanding and active interest in the protection of public lands.

Great Old Broads for Wilderness ("Broads") is a national non-profit organization that engages and ignites the activism of elders to preserve and protect wilderness and wild lands. Conceived by older women who love wilderness, Broads gives voice to the millions of older Americans who want to protect their public lands as Wilderness for this and future generations. We bring knowledge, commitment, and humor to the movement to protect our last wild places on earth. Since it was founded twenty-six years ago, Broads has been a voice for millions of older Americans who want to see public lands preserved as wilderness and roadless lands for future generations of all species. With more than 5,000 members and advocates, Broads works to protect vital ecosystems, wild natural landscapes, and healthy wildlife habitats. Broads has 36 volunteer-led grassroots chapters ("Broadbands") in 15 states, with 9 chapters in Colorado. Broads Grand Junction Broadband and Northern San Juan Broadband have 275 members who live, work and recreate in areas in and near the proposed SBEADMR.

Rocky Mountain Wild ("RMW") protects, connects, and restores wildlife and wildlands. We envision a biologically healthy future for our region with a diversity of species, healthy ecosystems and thriving populations of wildlife. RMW has a long history of interest in the management of public lands in Colorado, with a special interest in forest issues that affect endangered and threatened species. RMW's 7000 members and supporters enjoy a wide variety of activities on Forest Service land including wildlife watching, camping, hiking, and other forms of recreation.

WildEarth Guardians is a nonprofit conservation organization with an office in Colorado and seven other states. WildEarth Guardians has more than 130,000 members and activists across the United States and the world. WildEarth Guardians protects and restores wildlife, wild places, wild rivers, and the health of the American West. WildEarth Guardians submitted timely DEIS comments on the SBEADMR project.

Linda Miller has been a neighbor of the GMUG for over forty years. She believes in the public process and seeks understand the impact of Forest Service decisions on the communities that are neighbors.

The Objectors have participated throughout the NEPA process for this proposal and hereby incorporate by reference, pursuant to 36 C.F.R. § 218.8(b), their scoping comments and comments on the Draft Environmental Impact Statement. The issues presented in this objection have been raised in these previous comments.

II. ISSUES PRESENTED

As described in detail in Section III, Objectors believe the agencies' decision-making, including the FEIS and ROD, violates law, regulation, or policy in numerous ways, including:

- The Forest Service failed to analyze a reasonable range of alternatives. 40 C.F.R. § 1502.14., *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1174 (10th Cir. 1999).
- The proposed project is not needed to meet the stated purpose and need regarding spruce treatments. 40 C.F.R. §1502.13., *City of Carmel-by-the-Sea v. United States Dept. of Transp.*, 123 F.3d 1142, 1155 (9th Cir. 1997).
- Major treatment of aspen is unnecessary.
- Treatment zones are too large and need to be reduced in order to minimize environmental harms.
- The Forest Service failed to disclose how it will accomplish road maintenance, monitoring and decommissioning, and failed to consider reasonably foreseeable impacts of road construction and use. *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 718 (10th Cir. 2009), 40 C.F.R. § 1508.8., 36 C.F.R. §§ 212 Subparts A and B.
- The Forest Service failed to take a hard look at the direct, indirect and cumulative impacts of SBEADMR. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989), Wilderness Society v. U.S. Forest Service, 850 F. Supp. 2d 1144, 1157-58 (D. Idaho 2012), 40 C.F.R. §§ 1502.16, 1508.7, 1508.8, 1508.25(c).
- Proposed treatments would adversely affect Canada lynx, a threatened species. 16 U.S.C. 1604(i).

III. PARTS OF THE PLAN UNDER OBJECTION AND STATEMENT OF REASONS IN SUPPORT OF CITIZEN GROUPS' OBJECTION

A. The Forest Service failed to analyze a reasonable range of alternatives.

Objectors raised various issues concerning insufficient range of alternatives beginning on p. 13 of their DEIS comments, and incorporate the argument therein, as allowed under 36 CFR § 218.8(b)(4).

The National Environmental Policy Act (NEPA) requires agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." The Forest Service must "[r]igorously explore and objectively evaluate all reasonable alternatives," including those suggested by the public.² Here, the Forest Service failed to consider reasonable alternatives.

The FEIS considers only two action alternatives, both of which are strikingly similar. For example, the maximum total acres proposed for treatment is the same for both, with 120,000 acres proposed across the life of the project.³ Treatment methods would be the same for each alternative.⁴ Both would require significant new road construction,⁵ entailing similar impacts. The acreage treated per year and the number of years required to implement the project would be the same.⁶ Both would produce a high volume of wood products.⁷ The stark similarities between the action alternatives constitutes an extremely narrow analysis of possible avenues to accomplish the project's purpose and need, leaving other viable options unexamined. Presenting only two action alternatives that treat the same amount of forest over the same lifespan, using the same treatment methods and with many identical impacts, does not satisfy NEPA's requirement to rigorously explore and objectively evaluate all reasonable alternatives.

An agency's analysis is inadequate where a viable but unexamined alternative is present.⁸ Courts hold that an agency need not provide a detailed study of alternatives that do not accomplish that purpose or objective, as those alternatives are not "reasonable." While NEPA "does not require agencies to analyze the environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or impractical or ineffective," it does require the development of "information sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned." ¹⁰

Here, the agencies' failure to consider an alternative that reduces proposed acreage treated violates NEPA. Courts have cautioned agencies not to put forward a purpose and need statement that is so narrow as to "define competing 'reasonable alternatives' out of consideration (and even out of existence)."

Alternatives that would treat less acreage and produce a lower volume would still meet the purpose and need, as they would still address the issues of spruce mortality and aspen decline, but they were not analyzed. "An alternative may not be disregarded merely because it does not offer a complete solution to

¹ 42 U.S.C. § 4332(2)(E).

² 40 C.F.R. § 1502.14(a).

³ U.S. Dept. of Agriculture, *Spruce Beetle Epidemic and Aspen Decline Management Response Final Environmental Impact Statement* (February 2016), at *vii*. [Hereinafter FEIS]

⁴ *Id*.

⁵ *Id*. at 35.

⁶ *Id*. at 5.

⁷ *Id.* at 222.

⁸ Dine Citizens Against Ruining our Env't, 747 F.Supp.2d 1234, 1256, (D. Colo. 2010), citing Or. Natural Desert Ass'n [v. Bureau of Land Management], 531 F.3d 1114 at 1121 (9th Cir. 2008) (finding viable but unexamined alternatives in an EA renders the analysis inadequate).

⁹ Citizens' Comm. to Save Our Canyons v. U.S. Forest Serv., 297 F.3d 1012, 1031 (10th Cir. 2002).

¹⁰ Colo. Envtl Coal. v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999) (quotations and alteration omitted). See also New Mexico ex rel. Richardson v. Bureau of Land Mgmt., 565 F.3d 683, 708 (10th Cir. 2009).

¹¹ Simmons v. U.S Army Corps of Engineers, 120 F.3rd 664 (7th Cir. 1997). See also Alaska Wilderness Recreation and Tourism Association v. Morrison, 67 F.3d 723 (9th Cir. 1995).

the problem."¹² As one court explained, "[o]bviously, any genuine alternative to a proposed action will not fully accomplish all of the goals of the original proposal. One of the reasons that Congress has required agencies to set out and evaluate alternative actions is to give perspective on the environmental costs, and the social necessity, of going ahead with the original proposal."¹³

Objectors did in fact posit alternatives in comments to the Forest Service.¹⁴ The agency responded with the following justification:

Maximum operational capacity of the GMUG to implement activities over the timeframe identified in the NEPA (8-12 years) is utilized in all action alternatives, as the scope and scale of the purpose and need is vast. Yet an adequate range of alternatives is not merely established by varying the measurable quantity of the action, in this case, by varying the treated acres.¹⁵

Regarding consideration of a "conservation alternative", organizations did not present one to the Forest Service to analyze throughout the long and highly participatory planning process; nonetheless, some conservation-oriented individuals and groups requested that treatments be limited to those areas immediately adjacent to infrastructure. This was considered by the Forest Service, but dismissed from further analysis in the FEIS; it would not have met the purpose and need.¹⁶

These dismissive responses fail to satisfy the agency's NEPA obligations. The FEIS states that Alternatives 2 and 3 meet the project's purpose and need.¹⁷ While we disagree with this position (and will address it in Section III.B of the Objection), relying on two substantively similar actions while precluding consideration of other viable ones violates NEPA's mandate to "rigorously explore and objectively evaluate all reasonable alternatives."¹⁸

Applying "maximum operational capacity" to address beetle-kill and Sudden Aspen Decline (SAD) implies that the agency has pre-ordained a path where the maximum treatment acreage is determined by the capacity of the Forest Service to prepare areas for treatment, and then is pre-set for the action alternatives. The treatment locations are then adjusted to allow achievement at the maximum treatment level. This unreasonable method tailors the purpose and need to meet the treatment methods rather than tailoring legitimate treatment methods to meet the purpose and need. A reasonable response to the spruce-beetle epidemic and SAD, one that does not require "maximum operational capacity of the GMUG," should have been examined.

As for a "conservation" alternative, Objectors suggested numerous ones for the Forest Service to consider:

¹² Citizens Against Toxic Sprays v. Bergland, 428 F. Supp. 908, 933 (D. Or. 1977).

¹³ Town of Matthews v. United States Dept. of Transp., 527 F. Supp. 1055, 1058 (W.D.N.C. 1981).

¹⁴ See Objectors' DEIS Comments at 3, 15. [Hereinafter DEIS Comments]

¹⁵ FEIS Appendix H-1, at 27 (emphasis added).

¹⁶ *Id*. at 29.

¹⁷ FEIS at 36.

¹⁸ 40 C.F.R. § 1502.14(a).

It is interesting that the Forest Service considered an alternative for increased logging, but ultimately rejected it without further analysis. The Forest Service did not, however, consider an alternative whose goal was to conserve important wildlife habitat and treat fewer acres. There is no explanation for why the Forest Service could not consider such an alternative. For example, the Forest Service could consider an alternative that does not treat areas that contain the Primary Constituent Elements for lynx critical habitat as identified by the U.S. Fish and Wildlife Service in its final revised rule designating critical habitat for lynx (September 2014). The Forest Service could consider an alternative that does not treat any lynx habitat. The Forest Service could consider an alternative that does not treat lynx linkage areas. The Forest Service could consider an alternative that does not treat any areas with a particular amount of dense horizontal cover. The Forest Service could consider an alternative that does not treat abundant and spatially well-distributed patches of mature, multi-storied spruce-fir stands. The Forest Service could work directly with the signatory organizations to develop a "conservation alternative" that it would agree to consider in detail. Such alternatives, however, have not been considered or analyzed.¹⁹

The agency did not propose any of these either individually or combined in a so-called conservation alternative. "An agency must on its own initiative study all alternatives that appear reasonable and appropriate for study at the time, and *must also look into other significant alternatives that are called to its attention* by other agencies, or *by the public* during the comment period afforded for that purpose." Objectors strongly encouraged the Forest Service to consider a reasonable range of alternatives in the FEIS. These requests were rebuffed. ²¹

The Forest Service acknowledges receiving public input on this issue, but dismisses it out of hand: "Regarding the range of alternatives, an adequate range of alternatives is not merely established by varying the measurable quantity of the action, but also by varying – as the action alternatives did – the objectives and locations of such actions." But varying the measureable quantity of the action, as proposed by Objectors, is in fact a critical aspect of alternative approaches to the proposed action. The Forest Service Handbook guides managers to "[e]nsure that the range of alternatives does not prematurely foreclose options that might protect, restore, and enhance the environment." An alternative that reduces the acreage treated and eliminates new road construction would significantly reduce the negative environmental impacts of the project. Reducing the quantity is much more than merely a volume or acreage issue; such an action would have myriad effects on road construction, burn piles, wildlife, soil quality, watershed health, invasive weeds, etc. Such an alternative could easily meet the purpose and need, while also significantly lessening environmental impacts, thereby fulfilling NEPA's intent to reduce

¹⁹ DEIS Comments at 15.

²⁰ Dubois v. Dep't of Agriculture, 102 F.3d 1273, 1291 (1st Cir. 1996), quoting Seacoast Anti-Pollution League v. Nuclear Reg. Comm'n, 598 F.2d 1221, 1231 (1st Cir. 1979) (emphasis added).

²¹ See FEIS Appendix H-1 at 26-31.

²² Draft Record of Decision (ROD) at 13.

²³ Forest Service Handbook 1909.15 § 14, effective September 14, 2011.

undesirable impacts to the environment and ensure that humans and nature can "exist in productive harmony".²⁴

The FEIS Response to Comments states that "The project was never conceived as a project exclusively for ecological benefit; it has always included economic, social, and ecological objectives." While this may be true, the proposed action appears to be conceived largely to meet economic objectives, and the FEIS ignores alternatives that could provide ecological benefit (in part by minimizing impacts) while still addressing economic, social and ecological goals. There is a need to take effective steps to protect public safety and infrastructure from fire risk. The most effective way of doing so is by removing flammable material from the immediate vicinity of infrastructure, not by modifying forest structure in remote areas. The former approach would be less expensive, much more effective at protecting public safety interests, less impacting to various resources, and consistent with the best available science. SBEADMR's objectives of safety, resiliency and recovery could be met by a project that focuses on areas immediately surrounding human infrastructure.

Consideration of reasonable alternatives is necessary to ensure that the agency has before it and takes into account all possible approaches to, and potential environmental impacts of, a particular project. NEPA's alternatives requirement, therefore, ensures that the "most intelligent, optimally beneficial decision will ultimately be made." By limiting itself to two similar actions, both of which necessitate implementation of treatments that would utilize the maximum operational capacity on the part of the GMUG, the Forest Service has not met this standard. This failure has caused the agency to foreclose options that would protect, restore, or enhance the environment, which violates the spirit and letter of NEPA and its implementing regulations.

B. The proposed project is not needed to meet the stated purpose and need regarding spruce treatments.

Objectors raised various issues concerning impacts of the action alternatives and how they were unnecessary to accomplish the project's purpose and need beginning on p. 16 of our DEIS comments, and incorporate the argument therein, as allowed under 36 CFR 218.8(b)(4).

The purpose and need as defined in the FEIS is to "reduce the safety threats of falling, dead trees and of managing wildfires on the landscape (safety); improve the resiliency of stands at-risk of insect and disease (resiliency); and to treat affected stands via recovery of salvageable timber and subsequent reestablishment of desired forest conditions (recovery)."²⁷ But treating spruce as analyzed in Alternatives 2 and 3 is tailored to accomplish primarily the economic recovery component of the purpose and need, while actively undermining safety and resiliency. It appears that recovering merchantable timber is really the underlying objective of SBEADMR. The Forest Service states that "In the DEIS and FEIS, Alternative 2 meets the 3 objectives in the purpose and need: *recovery of economic benefit*; promoting

²⁴ See 42 U.S.C. § 4331.

²⁵ FEIS Appendix H-1 at 9.

²⁶ Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n, 449 F.2d 1109, 1114 (D.C. Cir. 1971).

²⁷ FEIS at 20.

resiliency in spruce and aspen stands; and increasing public safety."²⁸ The emphasis on economic benefit is paramount and prioritized in the FEIS.

The requirement for a discussion of purpose and need in an EIS is to "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." This discussion is important for general context and understanding as well as to provide the framework in which "reasonable alternatives" to the proposed action will be identified. While an agency has some discretion in fashioning an action's purpose and need, agencies may not constrain the range of alternatives by "defin[ing] its objectives in unreasonably narrow terms." We do not object to the stated goals of safety, resiliency and recovery per se, but we do object to the unreasonableness and inefficiency of the action alternatives in accomplishing those goals. The FEIS acknowledges that the scope and scale of the purpose and need is vast, but has failed to establish any objective, causal relationship between the presence of spruce bark beetle on the GMUG and the need for a project that would need to use the "maximum operational capacity" and "include the maximum number of acres the GMUG can feasibly accomplish" to respond to that presence.

Safety

The FEIS posits the following Public Safety goals:

- 1. Remove hazard trees proximal to roads, utility corridors, communication sites, dispersed recreation sites, developed campgrounds and other recreation sites, and within ski areas both within and outside the wildland urban interface (WUI).
- 2. Increase the extent of defensible space around values at risk.
- 3. Provide safer locations from which firefighters can initiate fire management actions.³⁵

The first component of the public safety goal, removing hazard trees proximal to human infrastructure, is arguably met (in fact excessively so) in both action alternatives, with a very large clearing distance along roads. However, overall safety could be accomplished with an alternative that restricts treatment to infrastructure areas (See Section III.D below), rather than across 120,000 acres of the forest. Reducing the safety threats of falling, dead trees is mainly an issue near human infrastructure. The fact that the proposed action calls for 178 miles of new roads to be constructed, away from current human use and into the backcountry, shows that the Forest Service is seeking to treat much more than necessary to safeguard human infrastructure.

²⁸ *Id.* at 36 (emphasis added).

²⁹ 40 C.F.R. §1502.13.

³⁰ 40 C.F.R. §1502.14(a) (emphasis added).

³¹ City of Carmel-by-the-Sea v. United States Dept. of Transp., 123 F.3d 1142, 1155 (9th Cir. 1997). See also Wyoming, 661 F.3d at 1244 ("agencies are not permitted to define the objectives [of a proposed action] so narrowly as to preclude a reasonable consideration of alternatives"); Davis v. Mineta, 302 F.3d 1104, 1119 (10th Cir. 2002); Citizens' Comm. to Save Our Canyons, 297 F.3d at 1030.

³² FEIS at 36, 37.

³³ *Id.* at 32, 36.

³⁴ FEIS Appendix H-1 at 222.

³⁵ FEIS at 20.

³⁶ *Id.* at *vii*.

The second and third goals are obfuscated by a heavy-handed solution desperately in search of a problem. Beth Anderson, the GMUG Soil and Water Program Lead, stated at the March 3, 2016 Public Lands Partnership General Meeting in Montrose that "According to the latest research, beetle kill is not linked to increased wildfires. Climate change and topography create wildfire risk." Objectors discussed the minimal effect the project would have on reducing fires at pp. 16-18 of our DEIS comments. The FEIS admits that "the risk of fire occurrence, (ie, ignition) may not be greatly impacted by the treatments." It goes on to tout the value of treatments in high priority WUI areas to better control fires.³⁸ But only a little over half of the priority treatment area acreage for Alternative 2 (102,159 acres out of 190,014 acres) is in the WUI.39

Managing wildfires on the landscape will not be significantly improved by the proposed action. In highelevation forests, high-severity wildfires are the norm, so bark beetle activity rarely makes those fires more severe than fires occurring in the absence of bark beetle outbreaks. In general, weather and climate are the key drivers of fire occurrence; large severe fires are more likely when it's hot, dry and windy, regardless of beetle outbreaks.⁴⁰

Subalpine forests of . . . Engelmann spruce . . . fall into the weather-limited category where tree-thinning prescriptions would not be expected to significantly decrease fire risk. More specifically, fires in subalpine forest are naturally large, catastrophic, and relatively infrequent.⁴¹

To date, the majority of studies have found no increase in fire occurrence, extent, or severity following outbreaks of spruce beetle in Colorado, Wyoming, and other areas. 42 The currently available evidence indicates that neither area burned nor severity of fires are being directly driven by increases in beetle caused tree mortality. 43 Data show that beetles have little influence on the occurrence 44 or severity of forest fires in the 10 to 15 years after the trees have died.⁴⁵

The FEIS notes that SBEADMR will enhance opportunities for firefighters to safely remain engaged while suppressing or managing fires for resource benefit.⁴⁶ But thinning and small patch cuts are not

³⁹ See FEIS Table 15 at 61, 62.

³⁷ At Appendix H-1, 114.

³⁸ *Id*.

⁴⁰ Robert A. Andrus, Thomas T. Veblen, Brian J. Harvey, Sarah J. Hart. Fire Severity Unaffected by Spruce Beetle Outbreak in Spruce-Fir Forests in Southwestern Colorado. Ecological Society of America, at 6. [Exhibit 1]

⁴¹Jason Sibold, PhD., Testimony before Congress, April 11, 2013, at 2 (emphasis added). [Exhibit 2]

⁴² E. g., Scott H. Black, Dominik Kulakowski, Barry R. Noon, Dominick A. DellaSala. *Do Bark Beetle Outbreaks* Increase Wildfire Risks in the Central U.S. Rocky Mountains? Implications from Recent Research. Natural Areas Journal, 33(1):59-65 (2013), at 59. [Exhibit 3]

⁴³ Robert A. Andrus, Thomas T. Veblen, Brian J. Harvey, Sarah J. Hart. Fire Severity Unaffected by Spruce Beetle Outbreak in Spruce-Fir Forests in Southwestern Colorado. Ecological Society of America.

⁴⁴ Hart, S.J., Schoennagel, T., Veblen, T.T., & Chapman, T.B. 2015. Area burned in the western United States is unaffected by recent mountain pine beetle outbreaks. Proceedings of the National Academy of Sciences. 112(14): 4375-4380. [Exhibit 4]

⁴⁵ Harvey, B.J., Donato, D.C., Turner, M.G. 2014. Recent mountain pine beetle outbreaks, wildfire severity, and postfire tree regeneration in the US Northern Rockies. Proceedings of the National Academy of Sciences. 111(42): 15120-15125. [Exhibit 5]

⁴⁶ FEIS at 69.

likely to reduce the fire hazard, nor would forest thinning projects be expected to reduce fire risk or mitigate against the likelihood of future bark beetle outbreaks in these forests.⁴⁷ As noted by Sibold et al:

. . . in the context of fuel treatments to reduce fire hazard, regardless of restoration goals, the association of extremely large and severe fires with infrequent and exceptional drought calls into question the future effectiveness of tree thinning to mitigate fire hazard in the subalpine zone. 48

In addition, the proposed treatments in spruce may even increase the fire risk by putting a considerable amount of fuel of all sizes on the ground, where it can more easily be ignited compared to standing trees after the needles have fallen off. If tree cover is reduced, wind and sun on a site would increase, and fuels would dry more readily. Furthermore, the FEIS proposes that from 80 to 178 miles of new roads be constructed on the GMUG; research has shown that road network density correlates with increased lightning fire incidence in western boreal forest.⁴⁹

In sum, the scientific evidence does not suggest that fire risk has increased as a result of recent and ongoing bark beetle outbreaks. *In contrast, the vast majority of evidence suggests that bark beetle outbreaks have either no influence on fire risk or potentially decrease fire risk, and that weather (drought) is the dominate influence on fire risk in these forests. The Forest Service has not demonstrated that treating tens of thousands of acres of spruce forest over an 8-12 year period will have any measurable impact on safety, apart from identifying and removing hazard trees near human infrastructure. Instead of developing a proposed action truly focused on safety, the agency is instead prepared to exercise maximum resource capability to respond to a perceived threat that is simply not there. In doing so, it compounds impacts on the forest and creates unnecessary negative effects.*

Resiliency

The FEIS posits the following resiliency goals:

- 1. Increase the forest's ability to respond to multiple and interacting stresses, including climate change, insect attack, drought or disease.
 - a. In healthier spruce-fir stands, promote regeneration and create multiple age classes of trees.
 - b. Where the beetle population is endemic, minimize spread of bark beetle from infected stands to neighboring healthy stands.⁵¹

⁴⁸ Jason S. Sibold et al., Spatial and Temporal Variation in Historic Fire Regimes in Subalpine Forests Across the Colo. Front Range in Rocky Mountain Nat'l Park, Colo., USA, 32 J. OF BIOGEOGRAPHY 631-647 (2006) [Exhibit 6]

⁴⁷ Jason Sibold, PhD., Testimony before Congress, April 11, 2013, at 1.

⁴⁹ M. Cecilia Arienti, Steven G. Cumming, Meg A. Krawchuk and Stan Boutin, *Road network density correlated with increased lightning fire incidence in the Canadian western boreal forest*, International Journal of Wildland Fire 18, 970–982 (2009). [Exhibit 7] See also *Final Environmental Impact Statement for the Roadless Area Conservation Rule*, 2001, at 3-105, which cites statistics showing many more fires originating in areas accessible by roads versus unroaded areas.

⁵⁰ Jason Sibold, PhD., Testimony before Congress, April 11, 2013, at 3 (emphasis added).

⁵¹ FEIS at 20. Part c of this goal, promoting aspen regeneration, is addressed in subsection C below.

The treatments proposed under SBEADMR would not increase the forest's ability to respond to stresses associated with the beetle epidemic, nor would it minimize the spread of bark beetle from infected stands to neighboring healthy stands.⁵² Resiliency treatments would likely be ineffective in making treated stands more resistant to spruce bark beetle. Only about 10 percent of the GMUG's total spruce acreage would be treated, ⁵³ which is an insignificant amount. In the areas not treated, there would still be numerous sources of spruce bark beetle to attack the spruce trees remaining in resiliency-treated stands.

The Forest Service responded to DEIS comments submitted by HCCA by stating:

Regarding the comments that resiliency treatments are moot given the limited scale of treatment, the Forest Service acknowledges that resiliency treatments are unlikely to prevent future spruce beetle epidemics and aspen decline across the entire Forest.⁵⁴

If resiliency treatments in spruce forests will not prevent future spruce beetle epidemics, then the need to initiate an expensive, multi-year, intrusive and road intensive project is unsupported by the evidence. Both action alternatives analyzed in the FEIS propose to treat the same acreage amount, despite neither being able to effectively prevent the spread of the epidemic. Most of the spruce treatment is likely to be salvage, because by the time the loggers get there, the spruce will be dead.⁵⁵ Recent research highlights the futility of the Forest Service's proposed attempts at forest resiliency:

Given the influence of tree stress on the development and spread of bark beetle outbreaks it is highly unlikely that forest-thinning projects would be able to mitigate the risk of future outbreaks. Moreover, thinning projects would not be expected to stop an outbreak once populations are at epidemic levels.⁵⁶

Once beetle populations reach widespread epidemic levels, silvicultural strategies aimed at stopping them are not likely to reduce forest susceptibility to outbreaks. Furthermore, such silvicultural treatments could have substantial, unintended short- and long-term ecological costs associated with road access and an overall degradation of natural areas. ⁵⁷

In contrast, forest-thinning projects could result in several unintended consequences. The consequences of greatest concern for forests include: killing seedlings and saplings in beetle-affected stands that are critical components of forest recovery, and increasing the likelihood of wind toppling remaining trees, which often acts as a catalyst for the development of bark beetle outbreaks in these systems.⁵⁸

⁵² DEIS Comments at 18.

⁵³ Draft ROD at 7.

⁵⁴ FEIS Appendix H-1 at 9 (emphasis added).

⁵⁵ See FEIS at 49.

⁵⁶ Jason Sibold, PhD., Testimony before Congress, April 11, 2013, at 4.

⁵⁷ Scott H. Black, Dominik Kulakowski, Barry R. Noon, Dominick A. DellaSala. *Do Bark Beetle Outbreaks Increase Wildfire Risks in the Central U.S. Rocky Mountains? Implications from Recent Research*. Natural Areas Journal, 33(1):59-65 (2013), at 59.

⁵⁸ Jason Sibold, PhD., Testimony before Congress, April 11, 2013, at 4

The agency does not demonstrate anywhere that its action alternatives will minimize the spread of bark beetles to healthy stands.

In focusing on large-scale, intrusive resiliency responses, the Forest Service ignores the ecological benefits of beetle-killed forest and the inherent resilience of the spruce ecosystem. Beetle-kill forests are surprisingly rich in biodiversity.⁵⁹ High severity fires often have ecological benefits, and are the norm in many systems, such as lodgepole pine and spruce-fir forests. Severe fire associated with beetle kill is not necessarily ecologically catastrophic, but rather a natural mechanism of renewal and diversity. The "snag forest" left behind from spruce-bark beetle infestations is a favorable habitat for many invertebrates and vertebrates because of the creation of canopy gaps and enhanced growth of understory plants. "Outbreaks create snags that may be used by various birds and mammals, including woodpeckers, owls, hawks, wrens, warblers, bats, squirrels, American marten and lynx."60 By removing the trees, you remove this benefit, and truncate the ecological processes providing the benefit.

While thinning⁶¹ has the potential to reduce tree stress, which can reduce susceptibility to insect attack, it also has the potential to bring about other conditions that can increase susceptibility. For example, thinning may injure surviving trees and their roots, which can provide entry points for pathogens and ultimately reduce tree resistance to other organisms Although thinning can be effective in maintaining adequate growing space and resources, there is accumulating evidence to suggest that tree injury, soil compaction, and temporary stress due to changed environmental conditions caused by thinning may increase susceptibility of trees to bark beetles and pathogens ⁶²

In addition, the broad scale program to treat stands on the GMUG that have been affected by the beetle requires an extensive road system, which will likely have significant impacts to forest and aquatic ecosystems, further complicating resiliency and ecological recovery.

Recovery

The following goals elaborate on the recovery component as stated in the FEIS:

- 1. Provide commercial forest products to local dependent industries at a level commensurate with Forest Plan direction and in harmony with other Plan goals (1991 GMUG Amended Forest Plan, p. III-3).
- 2. Subsequent to treatment, treat fuels, prepare sites, and re-establish and maintain forest cover via replanting where seed sources are lacking.⁶³

⁵⁹ See http://www.durangoherald.com/article/20160302/NEWS06/160309880/Beetle-kill-zones-surprisingly-rich-inbiodiversity (last visited March 15, 2016).

⁶¹ Though patch cuts instead of true thinning would be done under SBEADMR, the effects are similar, in that heavy equipment would be used, causing the same impacts to residual trees and soils described in this quotation.

⁶² Scott H. Black, Dominik Kulakowski, Barry R. Noon, Dominick A. DellaSala. Do Bark Beetle Outbreaks Increase Wildfire Risks in the Central U.S. Rocky Mountains? Implications from Recent Research. Natural Areas Journal, 33(1):59-65 (2013), at 62.

⁶³ FEIS at 21.

It is unproven whether dead and dying spruce can be treated commercially. The DEIS states that "[o]nce dead, trees remain merchantable for about 3-5 years." This statement is removed in the FEIS and not replaced by another assessment of timeframe for merchantability. By the time implementation of SBEADMR begins, many trees will have been dead 3-5 years or more. They will by then have developed weather checks and splits, and will not be suitable for manufacture into dimension lumber.

Ecological recovery of beetle-kill forests is compromised by the economic recovery proposed by the Forest Service. Negative impacts from post-kill harvest are extensive:

Post-disturbance harvest is common practice on forest lands and is designed to remove trees or other biomass in order to produce timber or other resources. This type of resource extraction has the potential to inadvertently lead to heightened insect activity In particular, snags and fallen logs contribute to the protection of soils and water quality and provide habitat for numerous cavity and snag-dependent species . . ., many of which prey on bark beetles and other economically destructive insects. Therefore, outbreaks could be prolonged because of a reduction in the beetle's natural enemies . . ., including both insects and bird species that feed on mountain pine beetles Furthermore, post-disturbance harvest can damage soil and roots by compacting them . . . leading to greater water stress in trees, which may reduce conifer regeneration by increasing sapling mortality . . . and, in general, may cause more damage to forests than that caused by natural disturbance events 65

Treatment is not necessary to provide for future forests. In four of six geographic areas (GAs), the majority of spruce-fir stands are multi-storied. In the GA with by far the largest spruce-fir acreage, Gunnison Basin (North and South combined), 79 percent of the spruce stands are multi-storied. In other words, the future forest has already begun for most of the project area's spruce-fir stands, and no treatment is necessary. In fact, the use of heavy equipment for logging would damage existing regeneration. Shade needed by young trees would be removed and soil would be compacted, making any new regeneration less likely. From the sound in the standard project area is a spruce-fir stands, and no treatment is necessary.

While an agency has considerable discretion to define the purpose and need for a project, ⁶⁸ project alternatives are supposed to derive from the purpose and need statement. In this case both action alternatives appear derived from the economic recovery objective of the project, while having limited relationship to or even undermining the safety and resiliency objectives. There is no reason to approve and implement the proposed spruce treatments at the scale proposed. Rather, any treatments in spruce-

⁶⁴ DEIS at 44. See also *id*. at 289.

⁶⁵ Scott H. Black, Dominik Kulakowski, Barry R. Noon, Dominick A. DellaSala. *Do Bark Beetle Outbreaks Increase Wildfire Risks in the Central U.S. Rocky Mountains? Implications from Recent Research*. Natural Areas Journal, 33(1):59-65 (2013), at 63.

⁶⁶ FEIS Table 1 at 4.

⁶⁷ See DEIS Comments at 22.

⁶⁸ Westlands Water District v. United States Department of the Interior, 376 F.3d 853 (9th Cir. 2004).

dominated areas should be limited to areas near infrastructure, where there is, or could in the future be, problems with public safety.

C. Major treatment of aspen is unnecessary.

Objectors discussed this issue beginning on p. 24 of our DEIS comments. We incorporate that argument by reference, as permitted by 36 CFR 218.8(b)(4). Below, we emphasize a few points.

The FEIS states:

In 2009, the detection of new areas dropped considerably, and little new area has been mapped since then. However, stands currently exhibiting SAD continue to decline.⁶⁹

All the stands that have been affected by SAD are probably more than 50 percent dead by now, or at least will be by the time SBEADMR is approved and project implementation could begin. It is generally accepted by scientists that aspen stands with greater than 50 percent mortality from SAD cannot be revived by treatment. Thus by the time SBEADMR implementation begins, there will likely be no stands with SAD where treatment would increase aspen survival.

In addition, information presented in the FEIS clearly shows that most of the aspen stands on the GMUG are multi-storied,⁷¹ meaning they can reproduce within themselves without disturbance. The FEIS further states:

Approximately 54% of the stands on the GMUG are experiencing regeneration, shifting the stand to a younger age class.⁷²

Stands are becoming younger, which will help aspen in the "threatened "⁷³ zone survive. The death of the conifer overstory from spruce bark beetle will also provide an opportunity for some existing aspen stands to expand.

There is simply no need to treat any aspen in response to SAD or to artificially induce aspen regeneration. As Objectors argued in DEIS comments, 74 such treatments may cause harm to multi-storied stands by damaging the understory, and by hastening the conversion to conifer in conifer-invaded stands.

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⁶⁹ FEIS at 2, 13.

⁷⁰ See FEIS at 17 and FEIS Appendix H-1 at 120. See also Shepperd, Wayne D., Ph.D., and Frederick W. Smith, Ph.D., Final 2013 Report Applied Silvicultural Assessment: Quaking Aspen Affected By Sudden Aspen Decline In Southwestern Colo., U.S. Forest Serv. Rocky Mountain Research Station Rocky Mountain Region, in Cooperation with Colo. State Univ. (2013) [Exhibit 8]; Worrall, James J., et al., Effects and Etiology of Sudden Aspen Decline in Southwestern Colo., USA, 260 Forest Ecology And Mgmt. 638-648 (2010). [Exhibit 9]

⁷¹ FEIS Table 3 at 12. Multi-storied aspen stands comprise a majority of aspen in four of the six geographic areas. ⁷² FEIS at 15.

⁷³ Threatened areas are where "future climate will be unfavorable [for aspen], but young stands will probably survive". FEIS at 16.

⁷⁴ At 25 and 26.

D. Treatment zones are too large and need to be reduced in order to minimize environmental harms.

Objectors raised this issue on pp. 26-27 of our DEIS comments, and incorporate the argument therein, as allowed under 36 CFR 218.8(b)(4).

In response to public comments, for hazard tree removal the Forest Service has reduced the treatment zones to 150 feet (from 300 feet) on each side of roads, except that the zones will remain 300 feet on each side of the road where the slope is greater than 40 percent. The 150 foot distance is said to be height of the average tree plus 20 percent. This would mean the average tree height is 120 feet. That is highly unlikely. In fact, it is not likely that any trees on the GMUG are that tall.

Clearing such large areas along roads would reduce wildlife habitat, degrade scenery, and might increase windthrow of remaining live trees.

The clearing zone for hazard trees on flat or gentle slopes need not be any more than the height of tallest tree in each respective stand plus 10 percent. This would be sufficient to protect road users. For steeper slopes that rise *above* the road, the clearing distance can be greater, but it does not need to be anywhere near 300 feet on each side. It can be determined on a case-by-case basis from the tallest tree in each respective area to be treated plus a safety margin of 10 percent. For steep slopes that drop *below* the road, the clearing distance can be less than that for other slopes.

Alternative 3 would concentrate treatments in the WUI.⁷⁷ The WUI "is defined [as]: 1 mile buffer from communities, developed sites, and administrative facilities and within ski area boundaries."⁷⁸

This is an unnecessarily large area for treatment. Areas that are one mile from a community or other infrastructure are not part of a WUI, and treatment to protect the infrastructure is not needed there. The Forest Service must fully consider an alternative that would treat only in the WUI plus a safety margin for firefighters, which would be considerably less than one mile distant from communities and other infrastructure. We recommended in our DEIS comments that such an alternative be considered. See also Section III.A above.

E. The Forest Service failed to disclose how it will accomplish road maintenance, monitoring and decommissioning, and failed to consider reasonably foreseeable impacts of road construction and use.

⁷⁵ FEIS at 49.

⁷⁶ *Id*.

⁷⁷ *Id.* at 57.

⁷⁸ *Id*.at 62.

⁷⁹ See, e.g. Jack D. Cohen, *Reducing the wildland fire threat to homes: where and how much?* USDA Forest Service Gen.Tech.Rep. PSW-GTR-173 (1999), at 192: "SIAM modeling, crown fire experiments, and W-UI fire case studies show that effective fuel modification for reducing potential W-UI fire losses need only occur within a few tens of meters from a home, not hundreds of meters or more from a home." [Exhibit 16] ⁸⁰ At 3.

Objectors raised various issues concerning insufficient analysis of road impacts beginning on p. 46 of their DEIS comments, and in DEIS comments submitted by WildEarth Guardians beginning at p. 43, and incorporate the arguments therein, as allowed under 36 CFR 218.8(b)(4).

Both Action Alternatives proffered in the FEIS propose significant road construction, reconstruction, maintenance and monitoring across the life of the project. The Proposed Action (Alternative 2) entails 178 miles of road construction, 538 miles of road reconstruction, and 714 miles of road maintenance. Alternative 3's maximum road treatments are also substantial: 80 miles or road construction, 336 miles of road reconstruction, and 497 miles of road maintenance. A notable change in the FEIS from the DEIS is the new determination that all roads constructed to implement SBEADMR treatments would be decommissioned within five years of the close of the associated commercial timber sale. 82

On paper this is a welcome change. In practice, however, it is unlikely that the Forest Service will be able to meet its decommissioning goals. The FEIS does not explain how it will secure funding for decommissioning, nor has the agency analyzed the long-term direct, indirect and cumulative impacts of a de facto road system that would be developed to facilitate the SBEADMR project. Without assurances from the Forest Service in the Record of Decision that it will be able to fund road maintenance and decommissioning for the life of the project, we question the accuracy of the NEPA analysis that limits its consideration of impacts from roads to the life of the project plus five years. 83

Road maintenance, decommissioning and monitoring require significant amounts of time, expertise, money and manpower, as described in the FEIS:

Maintenance activities generally include: blading; brushing; removal of roadside hazard trees; repair and/or replacement of road surfaces; cleaning, repair, or installation of drainage structures such as culverts, ditches, and dips; dust abatement; removal and installation of closure barriers, and installation or repair of signs.⁸⁴

Decommissioning involves a combination of the following rehabilitation tools: removing bridges and culverts, eliminating ditches, out-sloping the roadbed, ripping and scarifying of the road surface to reduce compaction and promote native vegetation, reseeding/replanting native vegetation, removing ruts and berms, effectively blocking the road to normal vehicular traffic where feasible under existing terrain conditions, and building cross ditches and water bars. When bridges and culverts are removed, associated fills shall also be removed to the extent necessary to permit normal maximum flow of water and reconstruction of the floodplain and stream channel as needed.⁸⁵

Invasive species monitoring will occur after road decommissioning and will be followed by weed treatments where needed. Effectiveness of road closure will also be monitored.⁸⁶

⁸¹ FEIS at 57, 61.

⁸² *Id.* at 35.

⁸³ Id. at 200.

⁸⁴ *Id*. at 51.

⁸⁵ *Id.* at 52, 53.

⁸⁶ FEIS Appendix H-1 at 88.

Unfortunately, the FEIS does not show how any of this will be accomplished, and the agency relies on unreasonable assumptions that funding will be available. The Forest Service states that "All new roads will be decommissioned following use which will reduce long term effects," but then states that "The question of funding to accomplish the road decommissioning is outside the scope of the DEIS." Funding in fact is directly within the scope of analysis, as decommissioning and monitoring cannot take place without a monetary commitment from the agency for the life of the project and beyond. Decommissioning is incorporated carte blanche into both action alternatives "with the commitment to decommission all roads within 5 years of the close of the associated timber sale." But the retention of any of these roads for a longer period is not analyzed in the FEIS. This assumption does not square with the current on-the-ground situation on the GMUG, or with regulatory and agency direction.

The GMUG manages over 3,600 miles of roads. ⁹⁰ Yet the GMUG's average road maintenance budget covers only a fraction of miles of roads that are due for maintenance, and at the same time, the GMUG expects that road maintenance budgets will decline. ⁹¹ Although the GMUG has not disclosed what the current total is for deferred maintenance, its Travel Analysis Report (TAR) proposed that in 2015 the Forest Service would only be able to maintain approximately 18 percent of total road miles. ⁹² The TAR discussed that the Forest Service was seeking to decrease maintenance funds, and also discussed how the Forest Service was seeking to decrease maintenance funds, and also discussed how the Forest Service was seeking to decrease maintenance costs. The Forest Service's assessment of maintenance costs for ML 2 roads is \$135,000 annually and these roads at most receive maintenance every five to eight years. ⁹³ Over a decade ago the 2005 GMUG Road Analysis Report found that the road system was not sustainable. ⁹⁴ This report documented that as of July 2005, the total deferred maintenance backlog just on ML 3-5 roads was over \$2 million. ⁹⁵ The report also documented that while total deferred maintenance needs on the GMUG continued to grow annually, the budget continued to shrink. This reduction in maintenance and funding reveals a systemic pattern of road neglect, while SBEADR proposes significant road construction and use by heavy logging trucks, adding to an already overburdened system.

Implementation of the 2010 Gunnison Travel Management Plan (TMP) has been slow and troublesome. FOIA-released documents indicate very slow progress by the agency on the Gunnison National Forest. It appears that in FY 2014 in the east zone of the Gunnison Ranger District, the agency implemented *one mile of work* from the Travel Management Plan. ⁹⁶ The TMP was finalized in 2010, yet the closure of

⁸⁷ FEIS Appendix H-1 at 59 (emphasis added).

⁸⁸ FEIS at 31.

⁸⁹ *Id.* at 36.

⁹⁰ *Id*. at 201.

⁹¹ Grand Mesa, Uncompahgre and Gunnison National Forests, Final Travel Analysis Report, Executive Summary (June 1, 2015), at 6. Available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3841509.pdf.

⁹² U.S. Forest Service, Grand Mesa, Uncompahgre and Gunnison National Forests, *Final Travel Analysis Report* (June 1, 2015), at D-1. Available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3841524.pdf.

⁹³ *Id.*

⁹⁴ U.S. Dept. of Agriculture, Grand Mesa, Uncompangre and Gunnison National Forests, Road Analysis Report (2005), at 2-15-17 and 3-25.

⁹⁵ *Id.* at 2-15-16.

⁹⁶ See FOIA Response – East Zone/Gunnison Ranger District Road Maintenance Accomplishments FY 2014 – 1st, 2nd and 3rd Quarters. [Exhibit 10].

approximately 550 miles on the Gunnison National Forest⁹⁷ advances at a very slow pace, largely limited thus far to noncontroversial areas. Implementation has either not begun or has been halted in particularly controversial areas of the forest. One notable (and newsworthy)⁹⁸ example of a problem with road decommissioning is the situation around the community of Pitkin in Gunnison County. When the Forest Service began to decommission the Powderhouse Gulch Road, as required under the TMP, the agency was confronted by an irate group of citizens who threatened to use force to block the decommissioning. The agency has still not decommissioned that route almost six years after finalizing the TMP.

We also are concerned that implementation of SBEADR will embolden the public to use unauthorized routes on the national forest. The FEIS states "Unauthorized routes used as haul roads will also be properly closed and decommissioned following use." A number of other routes exist in the project area but are "unmanaged": *These unauthorized roads can be user-created or a remnant of past management activity.*" Use of unauthorized routes is already a significant problem on the GMUG. Legitimatizing the use of unauthorized routes to facilitate implementation of SBEADMR will only embolden a minority of the public to use these routes, further complicating and stressing the maintenance and decommissioning process.

Given monetary uncertainty and negative public response to decommissioning, we have little confidence in the FEIS statements that roads will be decommissioned in a timely manner. Without a credible assurance in the ROD that decommissioning will have proper funding, it is not likely that authorized or unauthorized routes will be removed. In fact, the situation would be compounded if unauthorized routes and past routes that are still on the landscape are used for SBEADMR, creating routes that are easier to use and access by the public, and thus very difficult to close or decommission. A proposal to construct and decommission 178 miles of roads on an already budget-strained forest system requires a hard look at the financial sustainability of doing so. The Forest Service should have disclosed the following:

- What are the present deferred maintenance costs for the GMUG?
- How would the increased costs for constructing, reconstructing, maintaining, decommissioning
 and monitoring roads affect the maintenance and decommissioning schedule associated with
 implementation of the Gunnison TMP?
- Is funding assured for the SBEADMR road work?

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⁹⁷ U.S. Forest Service, *Record of Decision for Gunnison National Forest Travel Management* (June 28, 2010), at 2. 98 YouTube videos documenting illegal full-size motorized use on closed Powderhouse Trail after implementing signage and closures were removed in September 2012. Part 1 documents the confrontation and threat USFS received when implementing closures in this area in 2012. Both Part I and II illustrate significant misunderstandings of the land management decisionmaking process and authority for travel management on public lands. See David Justice, Pitkin v. Goliath Part 1 (Feb. 3, 2013) https://www.youtube.com/watch?v=joQzpWC-gCo and David Justice, Pitkin v. Goliath Part 2 (Feb. 3, 2013) https://www.youtube.com/watch?v=NYnTHtDIeXA (both last visited March 14, 2016) (both are also on file with HCCA). *See also* William Shoemaker, *Group Threatens Re-opening Closed Road Near Pitkin*, Gunnison Country Times, Sept. 27, 2012 at A3. [Exhibit 11]

¹⁰⁰ FEIS at 202 (emphasis added).

The assumptions in the FEIS undermine the agency's NEPA analysis. The Forest Service states that "The retention of any of these roads for a longer period is not analyzed in this NEPA document." But the GMUG's budgetary problems render its ability to maintain, reconstruct, decommission and monitor hundreds of miles of road suspect. In taking a hard look at direct, indirect and cumulative impacts, the Forest Service must analyze all impacts that are "reasonably foreseeable." [A]ssessment of all 'reasonably foreseeable' impacts must occur at the earliest practicable point." Reasonable forecasting and speculation is . . . implicit in NEPA" and courts "reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as a 'crystal ball inquiry." It is reasonably foreseeable that the GMUG will not have adequate funding to maintain, reconstruct, decommission and monitor the extensive road network planned for this project, leading to unexamined direct, indirect and cumulative impacts.

In its impacts analysis for various resources the FEIS states over and over that decommissioning will occur: "all new stream crossings will be decommissioned within 5 years after harvest¹⁰⁵" "Temporary roads and designed roads would be decommissioned, reducing the compaction [of soil];" "all constructed roads will be decommissioned and vegetation including trees will be reestablished over time" (looking at lynx impacts). ¹⁰⁷ Thus significant deference is given to the assumption that funding will support road work, leaving long-term impacts to lynx and other resources unexamined.

The Forest Service must ensure that the actions proposed under SBEADMR are consistent with the Travel Management Rule. ¹⁰⁸ The goal of the rule is "to maintain an appropriately sized and environmentally sustainable road system that is responsive to ecological, economic, and social concerns." ¹⁰⁹ The Forest Service's Washington Office has issued a series of directive memoranda that outline how the agency expects forests to comply with the rule. First, each forest was required to submit its TAR by September 30, 2015. ¹¹⁰ Next, pursuant to its own regulations and directive memoranda, the Forest Service must consider the valid portions of its TAR and begin to determine the minimum road system (MRS) in its analysis of site-specific projects of the appropriate geographic size under NEPA. ¹¹¹ By analyzing whether a proposed project is consistent with the relevant portions of the TAR, and considering the MRS factors under 36 CFR 212.5(b)(1), the Forest Service expects each forest to identify the MRS for particular forest segments. ¹¹² ("The resulting decision [in a site-specific project] identifies the MRS and unneeded roads for each subwatershed or larger scale").

¹⁰¹ *Id.* at 36 (emphasis added).

¹⁰² 40 C.F.R. § 1508.8.

¹⁰³ New Mexico ex rel. Richardson v. Bureau of Land Mgmt., 565 F.3d 683, 718 (10th Cir. 2009).

¹⁰⁴ Scientists' Inst. for Pub. Info. v. Atomic Energy Comm'n, 481 F.2d 1079, 1092 (D.C. Cir. 1973).

¹⁰⁵ FEIS at 144, 153, 168, and 171.

¹⁰⁶ *Id*. at 211.

¹⁰⁷ *Id*. at 476.

¹⁰⁸ 36 C.F.R. 212, Subpart A.

Memorandum from Leslie Weldon to Regional Foresters et al. on Travel Management, Implementation of 36 CFR, Part 212, Subpart A (Mar. 29, 2012) (hereafter, 2012 Weldon Memo).
 Id

¹¹¹ *Id.* at 2 (directing forests to "analyze the proposed action and alternatives in terms of whether, per 36 CFR 212.5(b)(1), the resulting [road] system is needed").

¹¹² *Id.* (emphasis added).

This was not done in the FEIS. In response to the requirements of 36 CFR 212(a), (b) and (c) the Forest Service states that "Travel plans exist for each of the national forests within the GMUG. No permanent changes to allowed motor vehicle use are proposed under the SBEADMR Project." Again, this rests on the unproven assumption that roads will be decommissioned, and ignores the direction to identify unneeded roads. The GMUG must assess SBEADMR's proposed road actions in relation to the TAR as well as the factors for an MRS, with the goal of minimizing adverse environmental impacts. Specifically, the decision to decommission or maintain certain roads should reflect the results from the risks and benefits analysis in the TAR. Routes identified for decommissioning through the TAR or other processes within the project area must be closed, decommissioned, and reclaimed to a stable and more natural condition during the life of the project. To the extent that the final decision in this project differs from what is recommended in the TAR, the Forest Service must provide an explanation for that inconsistency. 114

An agency's underlying substantive duty should inform the scope of the agency's NEPA analysis. The Forest Service has a substantive duty to identify the minimum road system it determines is needed to, *inter alia*, ensure the "identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance." Under NEPA, it also has a duty to consider the effects of its proposed action when added to the existing road and trail system. 117

Here, the agency is proposing to construct 178 miles of temporary roads. Temporary roads must be closed within 10 years of completion of a project, per 16 U.S.C. 1608(a), unless the Forest Service re-evaluates the road and determines it to be necessary for the minimum road system. The Forest Service must ensure that the temporary roads will in fact be temporary by including monitoring and enforcement of the closures within 10 years following completion of the projects.

During the project, however, and for an additional 10 years after completion of the project, the temporary roads will continue to have very real impacts on the landscape. For example, temporary roads will continue to allow for harassment of wildlife, littering, fires, invasive plant distribution, and negative impacts to aquatic and riparian habitat, as well as the fish that depend on that habitat.

The agency must consider the effects of its proposal to construct temporary roads when combined with the effects of its minimum road system. It must also consider how construction of the proposed temporary roads will detract from the purpose of subpart A of the agency's own rules, to "identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of the National Forest System lands." This is especially true if the Forest Service fails to provide assurances

¹¹³ FEIS at 197.

¹¹⁴ See, e.g., *Smiley v. Citibank*, 517 U.S. 735 (1996) ("Sudden and unexplained change . . . or change that does not take account of legitimate reliance on prior interpretation . . . may be 'arbitrary, capricious [or] an abuse of discretion") (internal citations omitted).

¹¹⁵ Westlands Water Dist. v. U.S. Dept. of the Interior, 376 F.3d 853, 866 (9th Cir. 2004) (When an agency takes an action "pursuant to a specific statute, the statutory objectives of the project serve as a guide by which to determine the reasonableness of objectives outlined in an EIS.").

¹¹⁶ 36 C.F.R. § 212.5(b).

¹¹⁷ Wilderness Society v. U.S. Forest Service, 850 F. Supp. 2d 1144, 1157-58 (D. Idaho 2012) (holding the Forest Service was arbitrary and capricious to conclude that designating 94 miles of user-created routes as non-system routes would have no significant impact).

¹¹⁸ 36 C.F.R. § 212.5(b).

that the proposed temporary roads will in fact be closed within 10 years of completion of the relevant project.

F. The Forest Service failed to take a hard look at the direct, indirect and cumulative impacts of SBEADMR

Objectors raised various issues concerning insufficient site-specific and cumulative impacts analysis beginning on p. 3 of their DEIS comments, and incorporate the argument therein, as allowed under 36 CFR 218.8(b)(4).

The FEIS is noticeably devoid of site-specific information. The Forest Service fails to incorporate site-specific analysis to properly inform the direct, indirect and cumulative impacts of SBEADMR. Under CEQ Regulations, all impacts of a proposed project or projects must be disclosed.¹¹⁹ This includes direct, indirect, and cumulative impacts (or effects) the proposed project may have, as well as connected, cumulative, and similar actions.¹²⁰

Federal "[a]gencies must 'take a hard look at the environmental consequences of proposed actions utilizing public comment and the best available scientific information." This hard look "assessment of all 'reasonably foreseeable' impacts must occur at the earliest practicable point, and must take place before an 'irretrievable commitment of resources' is made." An agency meets the 'hard look' requirement when it has 'made a reasoned evaluation of the available information and its method was not arbitrary or capricious." 123

Additionally, NEPA requires that this hard look assessment take place at the site-specific level if there are no additional NEPA processes yet to occur in the future to fully implement the project and the environmental impacts are reasonably foreseeable. Here, the Forest Service failed to do this in the SBEADMR FEIS.

For the Forest Service to fulfill its obligation to take a "hard look" at the environmental effects of SBEADMR, the FEIS must focus its analysis on those areas and resources likely to be impacted by the proposed action. ¹²⁵ As part of that hard look, agencies must "succinctly describe the environment of the area(s) to be affected or created by the alternative under consideration." ¹²⁶ The FEIS does not do this. Hundreds of thousands of acres of Priority Treatment Areas shown as blocks on maps is not a substitute for site-specific description and analysis. NEPA requires the action agency to set an appropriate baseline

¹¹⁹ 40 C.F.R. §§ 1502.16, 1508.8, 1508.25(c).

¹²⁰ 40 C.F.R. § 1508.8; 40 C.F.R. § 1508.25(c).

¹²¹ Biodiversity Cons. Alliance v. Jiron, 762 F.3d 1036, 1086 (10th Cir. 2014) (internal citation omitted).

¹²² Colo. Envtl. Coal. v. Ofc. of Legacy Mgmt., 819 F. Supp. 2d 1193, 1208 (D. Colo. 2011) (citing New Mexico ex rel Richardson v. Bur. of Land Mgmt., 565 F.3d 683, 718 (10th Cir. 2009) reconsid. granted in part on other grounds, 2012 WL 628547 (D. Colo. Feb. 27, 2012).

¹²³ *Jiron*, 762 F.3d at 1086 (internal citation omitted).

¹²⁴ See New Mexico ex rel Richardson, 565 F.3d at 718-19 (requiring site-specific NEPA analysis when no future NEPA process would occur); Ofc. of Legacy Mgmt., 819 F. Supp. 2d at 1209-1210 (requiring site-specific NEPA analysis even when future NEPA would occur because "environmental impacts were reasonably foreseeable"); cf. Wyoming v. U.S. Dept. Agric., 661 F.3d 1209, 1256 (10th Cir. 2011) (not requiring site-specific NEPA analysis because decision was "a 'broad' nationwide rule" allowing Forest Service to evaluate effects "generically").

¹²⁵ See 40 C.F.R. § 1508.25(c); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350-51 (1989).

¹²⁶ 40 C.F.R. § 1502.15.

detailing the nature and extent of the resources in the area: "The concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process." "Without establishing . . . baseline conditions . . . there is simply no way to determine what effect [an action] will have on the environment and, consequently, no way to comply with NEPA." Without knowing specifically where it will conduct timber treatments and where it will construct 178 miles of road, the agency is unable to understand the effects of the proposed action or to craft and analyze alternatives to protect these values.

The Proposed Action would treat 120,000 acres across three national forests over 8-12 years in nine counties. Given the vast geographic and temporal scope of SBEADMR, it is not surprising that the FEIS has failed to take the requisite hard look at impacts. The FEIS is essentially a programmatic document, without being labeled as such by the Forest Service. But the programmatic nature of the FEIS does not obviate its responsibility to analyze site-specific impacts. CEQ guidance states:

A broad (e.g., regional or landscape) description may suffice for characterizing the affected environment in programmatic NEPA reviews, *so long as potentially impacted resources are meaningfully identified and evaluated*.¹²⁹

The ability of the FEIS to meaningfully identify and evaluate impacted resources is hampered by the sheer scale of the proposal. The FEIS's lack of site-specific information makes it impossible for the Forest Service to disclose and analyze the differing impacts of the alternatives. Neither the agency nor the public can compare alternatives until the Forest Service discloses the areas to be treated and the resources that may be impacted by the different actions.

Across the GMUG the Forest Service prepared Priority Treatment Areas (PTAs) totaling 46,000 to 113,000 acres for commercial treatments and 56,000 to 77,000 acres for non-commercial treatments. But specific treatment locations are unknown. Therefore, the FEIS should have, but failed to, disclose the *values* and *resources* present within the PTAs that are proposed for road construction, logging and significant human intrusion. Based on those specific values and resources the FEIS should have made reasonable projections about what impacts will occur. Yet neither the FEIS, nor non-NEPA compliant future project implementation, ¹³¹ contains any of the necessary baseline information about, or analysis of potential impacts to, the specific areas to be logged and otherwise treated.

<u>Watersheds</u> – Impacts to watersheds and soils may be greater than stated because road decommissioning may not occur as proposed (see Section III.E above), and there is no analysis of connected disturbed area. Objectors raised various issues with soil and watershed protection beginning on p. 38 of their DEIS comments.

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¹²⁷ See Council on Environmental Quality, *Considering Cumulative Effects under the National Environmental Policy Act* 41 (January 1997). [Exhibit 12]

¹²⁸ Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci, 857 F.2d 505, 510 (9th Cir. 1988).

¹²⁹ Council on Environmental Quality, Memorandum for Heads of Federal Departments and Agencies, *Effective Use of Programmatic NEPA Reviews* (December 18, 2014), at 32 (emphasis added). [Exhibit 13]

¹³⁰ FEIS at 35.

¹³¹ Site-specific NEPA could be done for Future projects. But this does not appear to be contemplated unless there is new information or changed circumstances. See FEIS at 42-43.

Many watersheds would require new road-stream crossings for roads to access treatment units under Alternative 2.¹³² Of note is that the Headwaters Dry Creek watershed in the Uncompanger GA would have seven new stream crossings.¹³³ This watershed, with existing impacts and treatment under the project, may exceed the 25 percent limit on disturbance from roads and mechanical equipment use imposed by design feature WOSP-10.¹³⁴

Two other watersheds which would exceed 20 percent disturbance with implementation of the project would also have new stream crossings: Upper Horsefly Creek and Upper Spring Creek, both in the Uncompanyanger GA, with one and 11 new crossings, respectively. ¹³⁵ Other watersheds with a large acreage of treatment would have stream crossings. For example, there would be six new creek crossings in Headwaters Los Pinos Creek and three in Pauline Creek, both in the Gunnison Basin South GA. ¹³⁶

In other words, there would be many new stream crossings needed to implement the project, all of which could facilitate delivery of sediment to streams. Decommissioning these crossings would be needed to make sure that WCPH management measures were followed, and that all watersheds have less than 25 percent disturbance as required by design feature WQSP-10.

Indeed, road decommissioning is frequently mentioned in the Watershed and Soils section of the FEIS as a measure that will help reduce impacts.¹³⁷ More specifically, decommissioning stream crossings (presumably as a part of road decommissioning) would purportedly help reduce impacts to soils and watershed.¹³⁸

The following design feature requires decommissioning in the water influence zone (WIZ):

Where access across the WIZ must be provided by temporary roads, they will be completely decommissioned by obliteration within 5-years of sale closure. Obliteration at crossings will include the removal of culverts and fill material, the re-contouring of stream banks to the original landform shape, and seeding and mulching of the disturbed surfaces. The remaining prism within the WIZ shall be de-compacted, seeded, and mulched. 139

However, the GMUG National Forest's ability to decommission all of the 178 miles of "temporary" roads said to be needed for Alternative 2 is questionable. We raised the issue of temporary roads not being decommissioned at p. 46 of our July 30, 2015 comments and in Section III.E above.

¹³⁴ *Id*. at B-25 and 196.

¹³² See tables for new stream crossings for each geographic area (GA), beginning on FEIS p. 153 and continuing through p. 176.

¹³³ *Id.* at 176.

¹³⁵ Id. at 176.

¹³⁶ *Id.* at Table 76, p. 164.

¹³⁷ See, e. g., id. at 143.

¹³⁸ See id. at 144, 153, 168, and 171.

¹³⁹ Design Feature WQSP-3B, FEIS at B-21.

In response to the issue of funding for decommissioning roads, the Forest Service responded as follows:

All new roads will be decommissioned following use which will reduce long term effects. The question of funding to accomplish the road decommissioning is outside the scope of the DEIS.¹⁴⁰

In other words, the agency refuses to consider the possibility (likelihood?) that sufficient money for decommissioning of roads built for the SBEADMR project will not be available, yet it assumes such roads *will* be decommissioned and thereby reduce the impacts of the project on watershed and soils.

With doubts about the GMUG's ability to decommission roads, the following management measures and design criteria from the Watershed Conservation Practices Handbook (WCPH) may not be met:

In each watershed containing a 3-rd (sic) order and larger stream, limit connected disturbed areas so the total stream network is not expanded by more than 10%. Progress toward zero connected disturbed area as much as practicable. Where it is impossible or impracticable to disconnect a particular connected disturbed area, minimize the areal extent of the individual connected disturbed area as much as practicable. In watersheds that contain stream reaches in diminished stream health class, allow only those actions that will maintain or reduce watershed-scale Connected Disturbed Area.¹⁴¹

We do not find an analysis of connected disturbed area (CDA) in the main body of the FEIS, or in Appendix I. However, it is obvious from the analysis that many watersheds will have 10 percent or more cumulative disturbance with SBEADMR and other reasonably foreseeable future activities. Has least some of these watersheds, there is likely disturbance connected to streams, which building more roads and stream crossings would increase.

With the large amount of treatment area and roads to access these units, it is reasonable to believe that CDA would increase under the project, and may not be mitigated or reduced because of insufficient decommissioning of roads. Watersheds in condition class 2 (diminished) may see increased CDA with the project, in violation of the WCPH management measure cited above. At best, with the lack of analysis of CDA, it cannot be determined if this management measure would be met.

It is also not likely that the following measure would be met:

In the water influence zone next to perennial and intermittent streams, lakes, and wetlands, allow only those actions that maintain or improve long-term stream health and riparian ecosystem condition. 144

¹⁴¹ FSH 2509.25, section 11.1, design criterion 1a.

¹⁴⁰ FEIS Appendix H-1 at 59.

¹⁴² Objectors raised the issue of SBEADMR compliance with the WCPH measure for CDA on p. 39 of DEIS Comments.

¹⁴³ See Tables 9-14 in FEIS Appendix I.

¹⁴⁴ WCPH management measure 3, section 12.1.

Constructing roads and crossing streams will not maintain or improve stream health or riparian ecosystem condition, especially if roads are not promptly decommissioned after project work was complete in each respective affected area.

The FEIS Fails to Take a Hard Look at Cumulative Impacts from Other Projects on the GMUG Numerous actions likely to interact cumulatively on the GMUG with SBEADMR are not analyzed. The Forest Service thus must review and analyze these potentially cumulative impacts. Cumulative impacts analysis must include detailed information and a clear analysis of effects on resources, not just a description of actions. A cumulative impact is defined as:

The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 145

NEPA requires the Forest Service to take a hard look at the cumulative impacts on the affected geographic area, not just the immediate SBEADMR planning area. ¹⁴⁶ In taking a hard look at cumulative impacts, the Forest Service must analyze all impacts that are "reasonably foreseeable." ¹⁴⁷ This mandate applies whether the NEPA document is programmatic or site-specific. ¹⁴⁸

The Forest Service states that it has improved its cumulative impacts analysis between the DEIS and the FEIS ("Incorporated additional cumulative effects analysis by summarizing past, present and reasonably foreseeable future actions and the additive effects of SBEADMR")¹⁴⁹, but does not analyze the additive effects. Numerous reasonably foreseeable actions are planned on the GMUG and in close proximity to SBEADMR's Priority Treatment Areas but inexplicably, the FEIS provides no analysis beyond vague generalities concerning the potential for cumulative impacts.

The Forest Service has failed to adequately consider the cumulative effects of this project in light of the 179,326 estimated disturbance acres from reasonably foreseeable future timber, fuels, oil and gas, reservoirs, fuels, ski areas and coal activities in which there are also proposed SBEADMR activities. (Actions considered are those within a HUC12 subwatershed and/or Lynx Analysis Unit in which there are also proposed SBEADMR activities.) Although the FEIS lists numerous projects, these projects were not analyzed by the Forest Service in conjunction with SBEADMR. The Supreme Court has held that "proposals for . . . related actions that will have cumulative or synergistic environmental impact upon a region concurrently pending before an agency must be considered together. *Only through*

¹⁴⁵ 40 C.F.R. § 1508.7.

¹⁴⁶ See *Grand Canyon Trust v. Federal Aviation Administration*, 290 F.3d 399, 342 (D.C. Cir. 2002); see also *NRDC v. Hodel*, 865 F.2d 288, 297-99 (D.C. Cir. 1988) (holding that agency violated NEPA when it considered only the effects within the planning area, rather than the interregional effect).

¹⁴⁷ 40 C.F.R. § 1508.8.

¹⁴⁸ See, e.g., *Kern v. BLM*, 284 F.3d 1062, 1072 (9th Cir. 2002); *Pacific Rivers Council v. U.S. Forest Serv.*, 668 F.3d 609, 623 (9th Cir. 2010).

¹⁴⁹ FEIS at 605.

¹⁵⁰ *Id*. at 743.

comprehensive consideration of pending proposals can the agency evaluate the different courses of action." ¹⁵¹

<u>Timber and Fuels</u> - The Forest Service lists 63 reasonably foreseeable timber and fuels projects occurring on the GMUG that are distinct from SBEADMR.¹⁵²

The SBEADMR IDT conducted a GIS analysis of treatments associated with the other existing and proposed NEPA decisions, as well as other reasonably foreseeable future vegetation activities, in order to determine which future activities may occur in watersheds where SBEADMR activities are proposed. They identified a total of 4,760 acres of commercial timber activities and a maximum of approximately 171,000 acres of noncommercial fuels activities that may be implemented in the timeframe of SBEADMR implementation. A detailed summary of such treatments are included in Chapter 3, Cumulative Impacts – Activities & Analysis Approach. The cumulative impacts of these related efforts, as well as other reasonably foreseeable activities, are disclosed in Chapter 3.¹⁵³

Thus the FEIS reveals that, in addition to the 120,000 acres proposed under SBEADMR, *over 175,000 acres of additional timber management may be implemented in the timeframe for the project*. This is a staggering amount of timber management on the GMUG. Yet the FEIS's cumulative impacts section is completely devoid of any semblance of analysis. In looking at other timber treatments, the FEIS limits cumulative impact analysis to general statements such as:

The vegetation and fuels reduction projects involve vegetation treatment similar to those proposed in the action alternatives for this project, and thus direct and indirect impacts on site are similar to those assessed in this report. Conducting many projects across the landscape in close temporal and geographic proximity is likely to result in greater cumulative impacts.¹⁵⁴

The above statement is not an analysis of cumulative impacts, but instead a general assumption without specific reasoning.

The Silviculture section of the FEIS states the following under "Cumulative Effects Common to Both Action Alternatives":

Approximately 7,800 acres of timber projects are identified as reasonably foreseeable within the planning area. These treatments would include forest stand improvement thinning and intermediate and regeneration harvests in the non-spruce-dominated forest types within the landscape (aspen, mixed conifer, lodgepole pine), and house log and firewood harvesting in the spruce-dominated forests. Local markets for these projects are limited, and would not support a large-scale harvesting program.¹⁵⁵

¹⁵¹ Kleppe v. Sierra Club, 427 U.S. 390, 410 (1976).

¹⁵² FEIS at 743-744.

¹⁵³ *Id*. at 33.

¹⁵⁴ *Id*. at 394.

¹⁵⁵ Id. at 456.

However, the FEIS lists many more acres of disturbance from timber and fuels projects, among other activities. ¹⁵⁶ For example, the Gunnison Basin North GA has 79,279 acres of disturbance from fuels projects and the Uncompaniere Plateau GA has another 67,274 acres of fuel projects. Yet there is no analysis of how these projects might affect the seral stages or habitat structural stages of stands.

Similarly, cumulative effects to wildlife habitat from vegetative management activities are discussed generally on pp. 672-673, but no attempt was made to quantify these impacts. The FEIS states that "cumulative effects are disclosed under each resource topic," but review of the discussions in the document reveal that there is very little actual analysis of the impacts from over 175,000 acres of intensive timber and fuels treatment on affected resources.

The court ruled against the Forest Service in *Blue Mountains Biodiversity Project v. Blackwood* due to the failure to analyze other proposed sales as part of the cumulative impact analysis in an EA prepared for a salvage timber sale. ¹⁵⁸ The agency there had proposed five timber sales at the same time and as part of a coordinated fire recovery strategy in a single watershed. However, nowhere in the EA did the agency analyze the cumulative effects from these coordinated actions. The court ruled that cumulative impacts analysis was required for all the projects, holding that the Forest Service must prepare a site-specific statement for logging projects and road building and could not rely on water impacts analysis of logging and road building in the programmatic EIS. ¹⁵⁹ In the case of SBEADMR, the FEIS lists numerous other timber projects on the GMUG, but provides little analysis of how those relate cumulatively with SBEADMR. A list, even an exhaustive one, does not satisfy NEPA's hard look requirement.

In *Neighbors of Cuddy Mountain v. United States Forest Service*, ¹⁶⁰ the plaintiffs challenged the EIS for a timber sale in the Payette National Forest in Idaho. They charged that the Forest Service analysis of cumulative effects lacked detail, and, in particular, failed to analyze in any detail three other reasonably foreseeable sales scheduled to occur in the same roadless area. ¹⁶¹ The court agreed, holding that "general statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided." ¹⁶²

<u>Coal</u> - The FEIS fails to include impacts to wildlife, forests and other resource values from proposed coal mine expansion in the North Fork. Table 119 notes the proposed West Elk and Elk Creek Coal Mines, but limits its analysis to the following:

If the Roadless Rule is not reinstated then 31 million metric tons of GHGs annually; and approximately 2 million of which are methane; for 2 more years. If the Roadless Rule is reinstated, annual CO2e 13,600,000-43,200,000 metric tons emissions over 9-17 years.¹⁶³

¹⁵⁷ *Id*. at 741.

¹⁵⁶ *Id*. at 743.

¹⁵⁸ Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998).

¹⁵⁹ *Id.* at 1213.

¹⁶⁰ Neighbors of Cuddy Mountain v. United States Forest Service (137 F.3d 1372 (9th Cir. 1998).

¹⁶¹ *Id.* at 1378.

¹⁶² *Id*. at 1380.

¹⁶³ FEIS at 251.

The FEIS fails to account for the recent proposals to expand the West Elk Coal Mine under 1,700 acres of the Sunset Roadless Area to access 10.1 million tons of coal, ¹⁶⁴ as well as the proposal to re-instate the North Fork Coal Mining Area exception for North Fork Roadless Areas. ¹⁶⁵ Table 327 notes the North Fork Coal Mining Area Exception, but only notes three acres of estimated surface disturbance, and does not analyze coal mining's impacts to resources cumulatively with SBEADMR. The exception would allow for temporary road construction for coal exploration and/or coal-related surface activities in a 19,700-acre area defined as the North Fork Coal Mining Area. ¹⁶⁶ Mining in this area would entail significant impacts to wildlife, water, air and other resources from road construction, methane drainage wells, associated infrastructure and increased access to a formerly quiet forest.

Cumulative impacts in conjunction with SBEADMR's proposed activities in the North Fork GA were not considered by the Forest Service. The Forest Service proposes 8,925 acres of commercial treatment and 13,144 acres of non-commercial treatment in the North Fork GA.¹⁶⁷ The cumulative impacts to resources in conjunction with mining across 19,700 acres of roadless landscape (much of which is aspen and spruce-fir forest) in the GA are unconsidered and unanalyzed.

In 2010, the Ninth Circuit rejected a BLM NEPA review for mineral exploration that had failed to include detailed analysis of impacts *from nearby proposed mining operations*, stating:

In a cumulative impact analysis, an agency must take a "hard look" at all actions. An . . . analysis of cumulative impacts must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment.... Without such information, neither the courts nor the public... can be assured that the [agency] provided the hard look that it is required to provide. ¹⁶⁸

Considering the high degree of disturbance to resources in the North Fork GA caused by the current and reasonably foreseeable future level of human activities, any incremental increase in negative impacts from SBEADMR will have the cumulative effect of reducing wildlife habitat and compromising other natural resource values. The Forest Service failed to consider the cumulative impacts of other present and reasonably foreseeable coal mining actions proximate to the proposed activities including, but not limited to, the impacts of coal development on wildlife.

Oil and Gas – The FEIS fails to analyze the cumulative impacts to surface resources from the numerous natural gas projects and proposals on and around the GMUG. Again, Table 327 lists nine projects, but there is no hard look analysis of impacts. Road building, pipeline construction and associated

¹⁶⁶ *Id*.

¹⁶⁴ 81 Fed. Reg. 8899-8906 (February 23, 2016) (Grand Mesa, Uncompangre and Gunnison National Forests; Colorado; Federal Coal Lease Modifications COC–1362 & COC–67232)

¹⁶⁵ Fed. Reg. 18,598-02 (April 7, 2015) (U.S. Forest Service and USDA, Roadless Area Conservation; National Forest System Lands in Colorado).

¹⁶⁷ FEIS at 320, 321.

¹⁶⁸ *Te-Moak Tribe v. U.S. Dep't of Interior*, 608 F.3d 592, 603 (9th Cir. 2010). See also *Wyoming Outdoor Council*, 351 F. Supp. 2d at 1243 (failure to adequately review all cumulative impacts is arbitrary and capricious and violates NEPA).

infrastructure from oil and gas development, in combination with the proposed SBEADMR activities, cumulatively could have a significant impact on wildlife, waters and other resources. Yet these impacts are not considered or analyzed in the FEIS. Much of natural gas development on the GMUG is located on and adjacent to the Gunnison National Forest in the North Fork GA. The FEIS notes proposed projects and includes approximate acreage disturbances, but provides no analysis of cumulative impacts. The cumulative impacts from SBEADMR and gas development in the North Fork GA will be significant, especially to the big game and other wildlife that utilize the area, but are unexamined

In sum, while the FEIS listed many projects, it failed to actually provide a hard look and detailed analysis of impacts. "To 'consider' cumulative effects, some quantified or detailed information is required. Without such information, neither the courts nor the public, in reviewing the [agency's] decisions, can be assured that the [agency] provided the hard look that it is required to provide." The FEIS's cumulative impacts analysis is skeletal, lacks analysis of effects, and lacks a transparent rationale for its conclusions. This is analogous to *Muckleshoot Indian Tribe v. United States Forest Service*, a case involving an EIS for a land exchange, in which the court found the cumulative impacts analysis to be too general. It observed that the EIS contained twelve sections on cumulative effects but that "these sections merely provide very broad and general statements devoid of specific, reasoned conclusions." The agency's analysis described activities but failed to analyze effects. The same is true here. The agency describes numerous reasonably foreseeable projects but does not analyze the effects cumulatively with those of SBEADMR.

In a cumulative impact analysis, an agency must take a "hard look" at all actions. An . . . analysis of cumulative impacts must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment.... Without such information, neither the courts nor the public... can be assured that the [agency] provided the hard look that it is required to provide. 172

Guidance from CEQ states: "If it is determined that significant cumulative effects would occur as a result of a proposed action, the project proponent should avoid, minimize, or mitigate adverse effects by modifying or adding alternatives." Despite significant impacts to diverse resources across the GMUG from the cumulative effects of this proposal, and the insistence from the conservation community that alternatives be added, the agency failed adequately explore other possibilities for meeting the purpose and need of SBEADMR.

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¹⁶⁹ Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1379 (9th Cir. 1998)

¹⁷⁰ Muckleshoot Indian Tribe v. United States Forest Service, 177 F.3d 800, at 802–03 (9th Cir. 1999).

¹⁷¹ *Id.* at 810-811.

¹⁷² *Te-Moak Tribe v. U.S. Dep't of Interior*, 608 F.3d 592, 603 (9th Cir. 2010). See also *Wyoming Outdoor Council*, 351 F. Supp. 2d at 1243 (failure to adequately review all cumulative impacts is arbitrary and capricious and violates NEPA).

¹⁷³ Council on Environmental Quality, Considering Cumulative Effects under the National Environmental Policy Act 45 (January 1997).

Additional NEPA Documentation is Required

A notable change between the DEIS and the FEIS is the latter's incorporation of a public notice and comment period for vegetation treatments during the course of SBEADMR implementation, as outlined in Appendix E. But these specific notice and comment periods will not include any NEPA analysis of impacts, and therefore do not substitute for NEPA compliance that is absent in the FEIS. NEPA requires a full evaluation of all specific impacts when the agency proposes to make an irreversible and irretrievable commitment of the availability of resources which usually occurs following a tiered site- or project-specific NEPA review.¹⁷⁴ There is no point in the SBEADMR process when this will be accomplished. The FEIS does not address the site-specific impacts in the widely different locations of the 120,000 acres of timber treatment.

The best the agency can guarantee is: "[P]ublic notice and comment period on an annual basis for out-year treatments will serve an important role to determine the continued sufficiency of this NEPA document;" and "In response to the public comment requesting more widespread opportunity for the public to comment on specific treatments implemented in SBEADMR, the process now includes an annual 30-day public notice and comment period for outyear SBEADMR treatments; comments would be considered by the responsible official." ¹⁷⁶

In *Muckleshoot Indian Tribe v. U.S. Forest Service*,¹⁷⁷ the Court held that the project-specific NEPA analyses that tiered to a programmatic EIS needed to consider the site specific impacts of a federal action because the programmatic EIS could not consider the site-specific impacts of later developed actions. Similarly, here, the Forest Service must conduct future NEPA analyses for SBEADMR projects and must consider the site-specific impacts of those actions in those future NEPA analyses. Courts may permit agencies to tier to programmatic documents,¹⁷⁸ but tiering's relevance is stretched beyond the breaking point by the Forest Service's attempt to rely on a general EIS to address confined timber treatments that have more focused impacts.¹⁷⁹ Here, the site-specific impacts that will occur as a result of the narrowly focused treatments forbid the Forest Service from merely relying on the general analysis in the FEIS. The Forest Service denial of NEPA-compliant collaboration during implementation of SBEADMR makes it difficult if not impossible for Objectors to participate in that process.

¹⁷⁴ N. Alaska Envtl. Ctr. V. Lujan, 961 F.2d 886 (9th Cir. 1992).

¹⁷⁵ FEIS at 43.

¹⁷⁶ FEIS Appendix H-1 at 17.

¹⁷⁷ Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800 (9th Cir. 1999).

¹⁷⁸ See 40 C.F.R. § 1508.28 (tiering is appropriate for referencing general discussions in larger impacts statements in subsequent narrower statements).

¹⁷⁹ See Natural Res. Def. Council, Inc. v. Morton, 388 F. Supp. 829, 840 (D.D.C. 1974) aff'd, 527 F.2d 1386 (D.C. Cir. 1976) and aff'd sub nom. Appeal of Pac. Legal Found., 527 F.2d 1386 (D.C. Cir. 1976) (holding that BLM programmatic statement alone, "unrelated to individual geographic conditions, does not permit the finely tuned and systematic balancing analysis mandated by NEPA.") (citations omitted); Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1213 (9th Cir. 1998) (holding that the Forest Service must prepare site-specific statement for logging project and road building after fire destroyed portions of forest and could not rely on water impacts analysis of logging and road building in programmatic EIS).

G. Proposed treatments would adversely affect Canada lynx, a threatened species.

Objectors raised various issues concerning lynx and snowshoe hare in our DEIS comments beginning on p. 27, and in DEIS comments submitted by WildEarth Guardians beginning at p. 28, and incorporate the arguments therein, as allowed under 36 CFR 218.8(b)(4).

The proposed SBEADMR project would be implemented across a large portion of Colorado that is home to a robust, but fragile, population of Canada lynx. Because the lynx is listed as threatened pursuant to the federal Endangered Species Act, and is an endangered species under Colorado State law, the EIS must adequately consider the effects of the project on lynx and its habitat by using the best available science. While we appreciate the changes from the DEIS to the FEIS with regards to the analysis of effects on lynx, the FEIS and draft ROD still do not fully respond to the DEIS comments, nor do they provide the public and decisionmaker with sufficient information to be able to fully analyze and consider the significant effects of the SBEADMR project on Canada lynx.

As described in greater detail elsewhere in this objection, perhaps the biggest issue with the SBEADMR project FEIS and draft ROD is the lack of site specific information. There is simply no way that the Forest Service can sufficiently analyze the effects of the proposed action without knowing specifically where it will log, and specifically where it will construct roads. Because of this significant deficiency, the FEIS and draft ROD continue to fail to disclose and analyze the direct, indirect, and cumulative impacts of the SBEADMR project on lynx, including impacts to its habitat and linkage areas. The FEIS does not provide the decisionmaker – or the public – with a full consideration of all impacts to lynx and lynx habitat, nor does it seek to minimize impacts to the lynx. Further, the DEIS presents inconsistent information and lacks clarity with regards to its presentation of the effects of the SBEADMR project on lynx.

The FEIS and Biological Assessment (BA) regularly refer to the Southern Rockies Lynx Amendment (SRLA) Biological Opinion (BiOp) for an analysis of the effects of logging on Canada lynx and Canada lynx habitat. While it is true that the SRLA does contemplate effects of timber management generally on lynx and lynx habitat, it cannot contemplate, disclose, or analyze the site-specific impacts of the SBEADMR project on lynx. Indeed, the SRLA Biological Opinion recognizes that "[e]ffects would be based on site specific conditions and would require subsequent project level . . . consultation with the [U.S. Fish and Wildlife] Service." The FEIS, however, fails to disclose and analyze the site-specific impacts of the SBEADMR project on lynx and lynx habitat. This failure violates both NEPA and the SRLA (and therefore the National Forest Management Act).

In our comments on the DEIS, we informed the Forest Service that it must fix an error in Table 68 of the DEIS. ¹⁸² The Response to Comments indicates that the Forest Service would fix that error. However, Table 224 of the FEIS (page 467) still contains this same error. Table 224 states that Canada lynx are *not* known or suspected to be present in the action area, despite several other statements in the FEIS and BA

¹⁸⁰ E. g., FEIS H-1 at 160; BA at 61. BA 76 even states that the effects of removing spruce-fir in stands with an aspen overstory "have already been addressed in the SRLA". But SRLA could not possibly have contemplated where such treatment might occur or what the impacts could be.

¹⁸¹ SRLA BiOp at 69 (July 25, 2008); see also id. at 74.

¹⁸² DEIS at 297-98.

clearly indicating that Canada lynx are known to occupy the action area. See, e. g, BA at 36, which states that lynx have been documented in the planning area.

Because SBEADMR contemplates such extensive logging in some of the most important lynx habitat in Colorado, the EIS must provide greater detail and fully disclose and analyze all impacts to lynx and lynx habitat. Ivan (2014) concluded that spruce-fir stands "may be the most valuable forest type for snowshoe hares in the region." Because of the importance of these stands, the environmental analysis takes on increased importance. As such, the Forest Service should have disclosed and analyzed snowshoe hare densities in the project area, and the anticipated effects of the SBEADMR project on snowshoe hare densities. Instead, the FEIS and BA discuss how the SRLA and the Lynx Conservation Assessment and Strategy have a conservation goal to "produce the desired snowshoe hare density within each LAU." The BA also states that "[u]nderstory vegetation will be retained as much as possible which will provide habitat for snowshoe hares." 185

Yet this is the extent of *any* discussion of snowshoe hare densities in the action area, or across the GMUG. There is no disclosure of current snowshoe hare densities, nor is there any analysis of SBEADMR's impacts on snowshoe hare densities both in the action area and across the GMUG. The FEIS and BA also do not assert that this information is not available. This omission violates NEPA and the SRLA.

Lynx avoid areas that have been clearcut, logged, and even thinned. The Interagency Lynx Conservation Assessment and Strategy (August 2013) (LCAS) includes vegetation management as one of the top four anthropogenic threats to lynx. ¹⁸⁶ The LCAS also recognizes that managing forests to the extent that the canopy is opened discourages use of those stands by lynx. ¹⁸⁷ Further, reduction in horizontal cover, which would occur with the SBEADMR project from logging operations damaging and destroying understory trees, degrades the quality of winter habitat for lynx. ¹⁸⁸ The LCAS also notes that lynx avoid clearcut areas, especially during winter. ¹⁸⁹ John Squires, one of the preeminent lynx researchers, also emphasizes the importance of maintaining and recruiting lynx winter habitat as opposed to winter hare habitat, as that is what is most important to conserve lynx, especially in winter when lynx are most taxed. *See* Squires et al., 2010. ¹⁹⁰ The FEIS and BA, however, ignore this science ¹⁹¹, and does not disclose or discuss how SBEADMR could possibly benefit lynx in light of this science.

The FEIS explicitly discusses the benefits of SBEADMR with regards to snowshoe hare. While important, but as described above currently insufficient, the FEIS also must discuss and analyze effects to lynx winter habitat, which may actually be more important than producing habitat for snowshoe hare. The Forest Service has confused these two issues and has failed to analyze and disclose the effects of the

¹⁸³ Jacobs Ivan et al., *Density and Demography of Snowshoe Hares in Central Colorado*, 78 THE J. OF WILDLIFE MGMT. 580–594 (2014). [Exhibit 14]

¹⁸⁴ FEIS at 460, BA at 24.

¹⁸⁵ BA at 69.

¹⁸⁶ See LCAS at 69.

¹⁸⁷ *Id*. at 73.

¹⁸⁸ *Id.* at 73, 74.

¹⁸⁹ *Id*.

¹⁹⁰ John Squires et al., Seasonal Resource Selection of Canada Lynx in Managed Forests of the Northern Rocky Mountains, 74 J. OF WILDLIFE MGMT. 1648–1660 (2010). [Exhibit 15]

¹⁹¹ See, e. g, FEIS Appendix H-1 at 162.

SBEADMR project on lynx winter habitat, as well as any effects on snowshoe hare density, recognizing that they are not the same thing. In fact, the FEIS and BA fail to mention lynx winter habitat once. There is no analysis or discussion of the effects of the project to lynx winter habitat, either in terms of retention or recruitment. The Forest Service should prioritize retention and recruitment of abundant and spatially well-distributed patches of mature, multi-storied forest stands (lynx winter habitat). The SBEADMR project does not conserve lynx winter habitat, nor does it manage stands in a manner that would allow younger stands to eventually become good lynx winter habitat. Young stands in the stand initiation stage may be decent habitat for snowshoe hares (once tree seedlings and saplings grow above the snow) but by themselves, they are not good lynx winter habitat. The Forest Service has ignored this in its environmental analysis. This issue was specifically raised in our DEIS comments, yet the Forest Service has ignored it, and refused to even respond to it in the response to comments.

It is at best questionable whether young trees in multi-storied stands would be conserved. Dense horizontal cover, which is very important for hare and lynx, will be avoided only where "practicable", and in blocks as small as 0.3 acres. ¹⁹² Even if implemented fully, the result would be well-fragmented habitat for hare and lynx. Further, because of the lack of site-specific detail in the FEIS and BA, and the fact that this will only be preserved "where practicable," there is no assurance that such habitat will be preserved for lynx.

The Southern Rockies Lynx Amendment (SRLA) includes objectives, standards, and guidelines designed to conserve lynx and lynx habitat in the Southern Rockies region. As described in the FEIS, the SBEADMR project fails to ensure compliance with the SRLA and therefore violates NFMA, because all projects and activities must follow the respective forest plan.¹⁹³ The FEIS is full of conclusory statements without any explanation as to why those conclusions were reached, what science those conclusions are based upon, what assumptions those conclusions are based upon, and what information was lacking in reaching those conclusions. Merely stating that SBEADMR will comply with the SRLA, without explaining how and why (which is next to impossible without site-specific analysis, or identification of where logging will occur), does not meet the Forest Service's obligation to ensure compliance with the law. NEPA and NFMA require more.

The Forest Service also cannot neglect its obligations with regards to SRLA guidelines merely because they are guidelines. The SRLA Biological Opinion (July 25, 2008) anticipated that "[g]uidelines would be implemented in most cases," and further anticipated that "[e]ffects would be based on site specific conditions and would require subsequent project level . . . consultation with the [U.S. Fish and Wildlife] Service." As such, the Forest Service must explain how and if it is implementing SRLA guidelines, and if not, provide an explanation for why it is not implementing each specific guideline. Again, the Forest Service cannot just state that it will meet each guideline, but must explain how it will do so. The FEIS and BA fail to do so.

The FEIS lists applicable SRLA objectives, standards, and guidelines. However, the FEIS fails to provide specifics as to how this project will meet these objectives, standards, and guidelines. Some of the conclusory statements that were included in the DEIS have been removed from the FEIS, but no

¹⁹³ See 16 U.S.C. 1604(i).

¹⁹² See FEIS at B-27.

¹⁹⁴ SRLA BiOp at 69.

additional explanation is given for how or why the project will meet the objectives, standards and guidelines.

Notably, there is no analysis at all of how SBEADMR would meet Standard All S1, which states:

New or expanded permanent developments and vegetation management projects must maintain habitat connectivity in an LAU and/or linkage area. 195

Note that this standard does not even appear in the list of standards, guidelines, and objectives from SRLA that are applicable to SBEADMR. ¹⁹⁶ Curiously, a related objective, All O1, is in this list, but compliance with it is also not analyzed. See further discussion below.

The BA purports to analyze connectivity at the geographic area scale¹⁹⁷ and at the LAU scale.¹⁹⁸ However, these analyses merely provide statistics regarding how treatment in each GA and LAU would bring the structural stages of vegetation toward a mysteriously modelled potential natural vegetation state. This is not analysis of connectivity, i. e., how lynx would be able to move across the landscape and within and between the LAUs during and after project implementation. This lack of analysis of the effects on a very important aspect of lynx ecology violated NEPA.

Objective ALL O1 relates to maintenance and restoration of lynx habitat connectivity in and between Lynx Analysis Units (LAU) and linkage areas. In Table 66 of the DEIS, in connection with this objective, the comments state, "Attainment occurs at the project-level through project layout and implementation of Design Features." While this statement was inadequate in the DEIS, the Forest Service has now removed it completely and does not discuss how it will meet Objective ALL 01 in the FEIS. Even if that language remained, there is no assurance that the objective would be met without a detailed explanation of how the project layout and design features will maintain lynx habitat connectivity.

Indeed, a review of the DEIS finds on only a few brief mentions of Objective ALL01, and none provide the level of specificity, either globally or on the site-specific level, as to how SBEADMR will meet this objective. Specifics must be included for the public to understand what exactly will be implemented on the ground in this project. The DEIS does not describe what project layout or Design Features will specifically lead to meeting this objective beyond DEIS Table 67's brief mention that permanent roads should not be built on ridge tops, saddles, or areas identified as important for lynx connectivity. But even this brief mention (which is no longer even found in the FEIS) fails to meet NEPA's requirements for disclosure and analysis. Ultimately, the FEIS simply fails to demonstrate how the SBEADMR project will maintain or restore lynx habitat connectivity (including what areas would be maintained and what areas would be restored) both within and between LAUs, as well as in and between lynx linkage areas. And this problem is not just limited to Objective ALL O1. There is also no analysis or explanation for how the project meets, implements, or deviates from the other SRLA objectives and guidelines.

¹⁹⁵ SRLA ROD at Attachment 1-1.

¹⁹⁶ BA at 37-38.

¹⁹⁷ *Id*. at 85 et seq.

¹⁹⁸ *Id.* at 98 et seq.

¹⁹⁹ DEIS at 293.

The BA provides some information on linkage areas.²⁰⁰ But this information is not adequate because it does not say: whether or not any linkage areas have been subject to treatment in the past, where specifically the treatments will occur and what type of treatment will occur, whether any roads would be built or reconstructed in the linkages, and what the concentration of treatments would be as a result of SBEADMR implementation. And similar to the analysis of connectivity (see above), the disclosure of impacts consists solely of statistics on treatment acres and how the seral stages of the tree stands would change. There is no analysis of how lynx usage of the linkage areas could be affected.

It also ignores one affected linkage completely. The Battlement Mesa linkage would have some non-commercial treatment.²⁰¹ But the impacts of such treatment on lynx are not disclosed in the BA or FEIS.

Absent this information, neither the decisionmaker nor the public can adequately assess the impacts of the proposal on lynx linkage areas.

This lack of specificity is common to all of the SRLA objectives, standards, and guidelines that are mentioned in the FEIS. First, short discussions about compliance with these objectives and guidelines that were in the DEIS have now been removed in the FEIS. The short discussions merely concluded that the project will meet all of these and follow the SRLA without any concrete analysis or substantiation about how they will do so, what the current status of the SRLA's requirements and habitat levels are, and what the resulting landscape would look like post-implementation, but now even that limited information has been removed. The Forest Service cannot assert compliance with the SRLA without an actual analysis of the SRLA objectives, standards, and guidelines, including disclosure of the baseline and disclosure of what specific effects SBEADMR will have on the SRLA objectives, standards, and guidelines, and whether the proposed action would comply with these components of SRLA.

Although Table 293 purports to provide this information, it is woefully inadequate. For example, the following explanation appears there for compliance with five objectives and a guideline:

Potential Natural Vegetation takes into account disturbance processes, soils and other factors. At a LAU-scale management toward PNV will create or maintain a mosaic of habitat conditions ideal for lynx and their prey.²⁰²

That is a conclusory statement not supported by analysis.

Another example of the lack of specificity and disclosure comes with regards to SRLA guideline VEG G5, which states that habitat for alternative prey species, primarily red squirrel, should be provided in each LAU. The BA, at 120-121, provides some general information on red squirrel. But the analysis seems to conclude that, because multi-story stands are good for the squirrel, and many such stands will remain after treatment, there would be little effect on squirrels, though it does admit that cutting live mature spruce could add to the effect on squirrels from beetle-killed spruce. However, the fact that stands are multi-storied does not mean they provide squirrel habitat. The trees must produce a good crop of cones and be tall enough for squirrels to climb to escape predators. There is no analysis of whether sufficient squirrel habitat will remain in each LAU after treatment, and thus no explanation of whether or not the Forest Service will be implementing guideline Veg G5, or how it intends to implement it. Nor

 201 See the map for the Grand Mesa GA at BA 147.

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²⁰⁰ At 97.

²⁰² FEIS at 602.

does the Forest Service analyze what alternative prey habitat would look like after the project is fully implemented and what alternative prey habitat is expected to look like in the more distant future within the project area. Absent the answers to these questions, the Forest Service cannot assert that it took the requisite hard look at the direct, indirect, and cumulative effects of the project, nor can it assure that the project would comply with the SRLA. The FEIS and BA violate NEPA and NFMA.

Similarly, the Forest Service neglects to describe its compliance with SRLA Guideline VEG G11 related to lynx denning habitat. In fact, both the FEIS and BA only discuss Guideline G11 when reciting all of the standards and guidelines from the SRLA, but no additional analysis is provided. The FEIS fails to discuss and analyze the current state of lynx denning habitat within the project area. Without this baseline, there can be no legitimate determination of the effects of the project on lynx denning habitat. The environmental analysis should disclose (preferably on a map) and analyze what portions of the project area currently is considered to be lynx denning habitat, what portions of that lynx denning habitat would be subject to SBEADMR treatments, what portions of lynx denning habitat would be degraded as a result of SBEADMR treatments, and how long it would take for degraded or destroyed denning habitat to once again become lynx denning habitat.

Importantly, the FEIS also does not disclose what percentage of each LAU is made up of lynx denning habitat, how much coarse woody debris currently exists within the denning habitat in each LAU, or what anticipated changes to coarse woody debris in each LAU's denning habitat would result from SBEADMR implementation. These unanswered questions must be answered both qualitatively and quantitatively. If the Forest Service does not have this information, it should not proceed with a major vegetation management project without knowing what kinds of effects it will have on important lynx denning habitat in the project area. If the Forest Service does not have this information, it cannot legitimately assert that it will comply with VEG G11. Again, conclusory statements without analysis and explanation are not sufficient for compliance with NEPA and the SRLA.

The U.S. Fish and Wildlife Service discussed the importance of denning habitat to lynx, and included denning habitat as a Primary Constituent Element "that provide[s] for a species' life-history processes and [is] essential to the conservation of the species" when determining which lands should be designated as Canada lynx critical habitat. 203 FWS explained "a feature or habitat variable need not be limiting to be considered an essential component of a species' habitat. Both denning and matrix habitats are essential components of landscapes capable of supporting lynx populations in the DPS because without them lynx could not persist in those landscapes." Because lynx denning habitat "is an essential component of the boreal forest landscapes that lynx need to satisfy a key life-history process (reproduction)," FWS identified "denning habitat to be a physical or biological feature needed to support and maintain lynx populations over time and which, therefore, is essential to the conservation of the lynx [distinct population segment]." That the FEIS and BA do not discuss compliance with the guideline related to denning habitat, or discuss how the amount of woody debris to be left on the landscape relates to this guideline or the needs of lynx is inadequate under NEPA and NFMA.

The FEIS Appendix B has two design features related to coarse woody debris:

²⁰³ 79 Fed. Reg. 54782, 54811-2 (Sept. 12, 2014).

²⁰⁴ 79 Fed. Reg. at 54786.

²⁰⁵ 79 Fed. Reg. at 54810.

Where feasible, maintain a minimum of 10-20 tons per acre of coarse woody debris within harvest units. Where possible in regeneration units, create piles of logs, stumps, or other woody debris to minimize the effects of larger openings.

Maintain large diameter downed logs in various stages of decomposition within harvest units (50 linear feet/acre of 10 inches diameter or larger at the large end of lodgepole pine and aspen logs and/or 12 inches diameter or larger for Engelmann spruce, subalpine fir and Douglas fir logs).²⁰⁶

Neither of these design features will ensure that lynx denning habitat is maintained, retained, or created, nor does the FEIS or BA explain why these measures may be sufficient. The first design feature above suggests creating piles in *regeneration_units*, i. e., where an attempt will be made to regenerate a new stand of trees. That is, a very open area will be created as part of the treatment. Lynx would not den in such areas, as they must have cover surrounding dens. Also, application of both parts of the first design feature is discretionary.

Maintaining 10-20 tons per acre or 50 linear feet of logs per acre would not likely result in creation of any structure that could be used for denning, as it is likely not enough wood, and it would be in harvest units, which would not be good denning habitat. Finally, any existing log piles in treatment units would be destroyed or moved if they are in the way of equipment used for implementation of the project.

Because lynx denning habitat must occur near lynx foraging habitat,²⁰⁷ the Forest Service must disclose and analyze how much denning habitat would be removed by the project, how much denning habitat would remain under the selected alternative, and whether the remaining denning habitat is near suitable lynx foraging habitat. Because this analysis is absent from the FEIS and BA, the Forest Service has not taken the required hard look at the effect of the project on lynx denning habitat.

With regards to SRLA VEG S1, S2, S5, and S6, the Forest Service failed to adequately explain the effects of SBEADMR implementation on these SRLA standards. For example, the Forest Service explains how much logging has occurred pursuant to exceptions to these standards, as well as the remaining amount of logging before the caps are reached, but the agency neglects to disclose what the total amount of logging under these exceptions and its relation to the caps for these standards would be. The public and decisionmaker should know how close to the SRLA caps the GMUG would be after implementation of the SBEADMR project.

Roads are a significant risk factor to the lynx population in the GMUG National Forest. This risk is echoed by the acknowledgement in the SBEADR DEIS that "[a]ny permanent road will result in a permanent loss of lynx habitat in LAUs." Despite this risk, the location of the roads is not included in the analysis, and it merely mentions that the location will be determined based on treatment needs and to minimize impacts to understory. This vague information is insufficient because the location of roads, especially permanent roads, is so significant to lynx habitat. Failure to provide this information violates NEPA's requirement that the Forest Service take a hard look at the impacts of its actions.

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²⁰⁶ FEIS at B-25, B-26.

²⁰⁷ See LCAS at 29.

²⁰⁸ At 329.

Cumulative impacts to lynx with regard to federal projects are not disclosed. The following statement appears in the BA:

Under NEPA, cumulative impacts are the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. In contrast, under ESA the estimated effects of future federal activities are not included, because those future federal actions will be subject to their own Section 7 consultation at the appropriate time. This BA is intended to fulfill ESA requirements. The cumulative effects analysis in the Environmental Assessment (sic) included an analysis of the potential effects caused by future federal actions, fulfilling NEPA requirements.²⁰⁹

Based in this, we would expect to see an analysis of cumulative effects that included foreseeable future national forest projects in the FEIS, in order to fulfill the NEPA requirement. However, we find the exact same statement as above at FEIS p. 540, with no analysis of cumulative impacts to lynx from future Forest Service activities. That is a serious omission because Table 327, FEIS at 743 et seq, shows a large number of reasonably foreseeable future projects on the GMUG National Forest, totaling 179,326 acres. Many of the items listed are fuels projects or timber sales. Impacts to lynx habitat from these projects, added to those from SBEADMR, could have a significant effect on lynx.

Finally, we would like to comment on an aspect of SBEADMR that has come to light since the DEIS comment period. These comments are appropriate to address in an objection because they relate to new information made available to the public after the close of the DEIS comment period. Included in FEIS Appendix H-2 is a comment letter from Patricia Dorsey, the Southwest Region Manager for Colorado Parks and Wildlife (CPW), dated July 28, 2015. Appendix H-2 was posted to the SBEADMR project webpage on February 4, 2016, and so represents new information that may be addressed in an objection under 36 C.F.R. § 218.8(c). The Dorsey comment letter explains:

"Results from CPW and USFS monitoring efforts indicate that lynx are still present in nearly all of the areas they inhabited prior to the spruce beetle outbreak on the Rio Grande NF (roughly 4-6 years ago depending on location). In 2015 two GPS-collared female lynx produced kittens within beetle-killed forest patches. Thus, we believe that areas lacking a living overstory, but with a sufficient understory are continuing to function as lynx habitat."

The Forest Service should have included a discussion about this information from CPW and the GMUG's sister forest and analyze whether or not this impacts any of the information in the FEIS or BA. Further, the Forest Service should have explained why, based on this information, such aggressive treatment is necessary to support Canada lynx.

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²⁰⁹ BA at 122.

²¹⁰ See 36 C.F.R. § 218.8(c).

²¹¹ FEIS Appendix H-2 at 14-15 (page 4-5 of Dorsey comment letter).

IV. SUGGESTED REMEDIES

First, Objectors request that the Forest Service not finalize the FEIS and ROD as written.

Second, Objectors request that the Forest Service analyze and disclose the effects of the so-called "temporary" roads in conjunction with the entire road system, as during the life of the project the entire road network (as opposed to their arbitrarily defined road "system") on the forest will grow dramatically.

Third, Objectors request that the Forest Service demonstrate in the ROD that there will be sufficient funding for maintenance, decommissioning and monitoring of roads for the life of the project, or if not, supplement the FEIS to disclose the impacts of the roads not being decommissioned as proposed.

Fourth, Objectors ask that the Forest Service consider alternatives that significantly reduce the acreage cut, significantly reduce or eliminate new road construction, and focus on areas necessary for public safety and infrastructure. Alternatives that fall between No Action on one end and logging 120,000 acres on the other end should be developed.

Fifth, the FEIS must be supplemented to complete the analysis of impacts, including cumulative impacts. Full analysis of all impacts is especially important for lynx. This supplement would need to be issued in draft form for public comment. Alternatively, the agency could commit to preparing NEPA analyses and allowing public comment and objection for individual projects or groups of them to be implemented under SBEADMR.

Should the objection reviewing officer determine that additional info is needed in the analysis, the public must have an opportunity to comment and object based on any additions.

Objectors appreciate your consideration of the information and concerns addressed herein, as well as the information included in the attached exhibits.

Should you have any questions, please do not hesitate to contact us.

Sincerely,

Matt Reed

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Exhibit List

Note: The below documents are referenced in the objection. Copies of these documents are included on a DVD enclosed with the paper copy of the objection (not included with electronic mail copy of comments). These documents are part of the objection and should become a part of the project record for the SBEADMR project.

Exhibit 1: Robert A. Andrus, Thomas T. Veblen, Brian J. Harvey, Sarah J. Hart. Fire Severity Unaffected by Spruce Beetle Outbreak in Spruce-Fir Forests in Southwestern Colorado. Ecological Society of America.

Exhibit 2: Jason Sibold, PhD., Testimony before Congress, April 11, 2013.

Exhibit 3: Scott H. Black, Dominik Kulakowski, Barry R. Noon, Dominick A. DellaSala. *Do Bark Beetle Outbreaks Increase Wildfire Risks in the Central U.S. Rocky Mountains? Implications from Recent Research.* Natural Areas Journal, 33(1):59-65 (2013).

Exhibit 4: Hart, S.J., Schoennagel, T., Veblen, T.T., & Chapman, T.B. 2015. *Area burned in the western United States is unaffected by recent mountain pine beetle outbreaks*. Proceedings of the National Academy of Sciences. 112(14): 4375-4380.

Exhibit 5: Harvey, B.J., Donato, D.C., Turner, M.G. 2014. *Recent mountain pine beetle outbreaks*, wildfire severity, and postfire tree regeneration in the US Northern Rockies. Proceedings of the National Academy of Sciences. 111(42): 15120-15125.

Exhibit 6: Jason S. Sibold et al., Spatial and Temporal Variation in Historic Fire Regimes in Subalpine Forests Across the Colo. Front Range in Rocky Mountain Nat'l Park, Colo., USA, 32 J. OF BIOGEOGRAPHY 631-647 (2006).

Exhibit 7: M. Cecilia Arienti, Steven G. Cumming, Meg A. Krawchuk and Stan Boutin, *Road network density correlated with increased lightning fire incidence in the Canadian western boreal forest*, International Journal of Wildland Fire 18, 970–982 (2009).

Exhibit 8: Shepperd, Wayne D., Ph.D., and Frederick W. Smith, Ph.D., *Final 2013 Report Applied Silvicultural Assessment: Quaking Aspen Affected By Sudden Aspen Decline In Southwestern Colo.*, U.S. Forest Serv. Rocky Mountain Research Station Rocky Mountain Region, in Cooperation with Colo. State Univ. (2013).

Exhibit 9: Worrall, James J., et al., *Effects and Etiology of Sudden Aspen Decline in Southwestern Colo.*, *USA*, 260 Forest Ecology And Mgmt. 638-648 (2010).

Exhibit 10: FOIA Response – East Zone/Gunnison Ranger District Road Maintenance Accomplishments FY 2014 – 1st, 2nd and 3rd Quarters

Exhibit 11: William Shoemaker, *Group Threatens Re-opening Closed Road Near Pitkin*, Gunnison Country Times, Sept. 27, 2012

Exhibit 12: Council on Environmental Quality, *Considering Cumulative Effects under the National Environmental Policy Act* (January 1997).

Exhibit 13: Council on Environmental Quality, Memorandum for Heads of Federal Departments and Agencies, *Effective Use of Programmatic NEPA Reviews* (December 18, 2014).

Exhibit 14: Jacobs Ivan et al., *Density and Demography of Snowshoe Hares in Central Colorado*, 78 THE J. OF WILDLIFE MGMT. 580–594 (2014).

Exhibit 15: John Squires et al., Seasonal Resource Selection of Canada Lynx in Managed Forests of the Northern Rocky Mountains, 74 J. OF WILDLIFE MGMT. 1648–1660 (2010).

Exhibit 16: Jack D. Cohen, *Reducing the wildland fire threat to homes: where and how much?* USDA Forest Service Gen.Tech.Rep. PSW-GTR-173 (1999).